DOCUMENT RESUME

ED 235 306 CE 036 991

AUTHOR Seeber, Suzanne R.
TITLE Microcomputers in Vocational Education.
INSTITUTION Kansas State Univ., Manhattan. Dept. of Curriculum and Instruction.
SPONS AGENCY Kansas State Dept. of Education, Topeka. Div. of Vocational Education.
PUB DATE Jun 83
NOTE 81p.; Parts of this document may not reproduce well.
PUB TYPE Reference Materials - Bibliographies (131) -- reference Materials - Vocabularies/Classifications/Dictionaries (134)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Agricultural Education; Allied Health Occupations Education; Annotated Bibliographies; Basic Skills; Business Education; *Computer Assisted Instruction; *Computer Managed Instruction; *Computer Oriented Programs; *Computer Programs; Distributive Education; Educational Media; Educational Trends; Futures (of Society); Home Economics Education; Marketing; *Microcomputers; Occupational Home Economics; Office Occupations Education; Postsecondary Education; Resources; School Counseling; Secondary Education; State Programs; Trade and Industrial Education; *Vocational Education
IDENTIFIERS *Kansas

ABSTRACT

This volume consists of resource listings and summaries of the status of the use of microcomputers in the various disciplines of vocational education in secondary and postsecondary level programs throughout Kansas. Provided in the first part of the document are discussions of the use of microcomputers in agricultural, vocational business, health-related, home economics, marketing and distributive, trade and industrial, and vocational counseling, basic skills, and general education. Each summary contains a narrative description of the current and projected uses of microcomputers in the given vocational education area as well as a listing of microcomputer software that is currently available and in use in each program area. The second part of the volume consists of a listing of software sources addresses and an annotated bibliography of works dealing with each of the topics in the first part. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

K S83 1330

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization onginating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

N Flott

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED235306

MICROCOMPUTERS IN VOCATIONAL EDUCATION

Kansas State Department of Education
Vocational Education Administration Section
JUNE, 1983

PREPARED AT THE DEPARTMENT OF CURRICULUM AND INSTRUCTION,
KANSAS STATE UNIVERSITY, MANHATTAN, KANSAS

WRITER: SUZANNE R. SEEBER PROJECT DIRECTOR: MARY McDONNELL HARRIS

BIBLIOGRAPHIC ASSISTANTS: KIMBERLEE POWELL RAHLFS, TOM RAHLFS

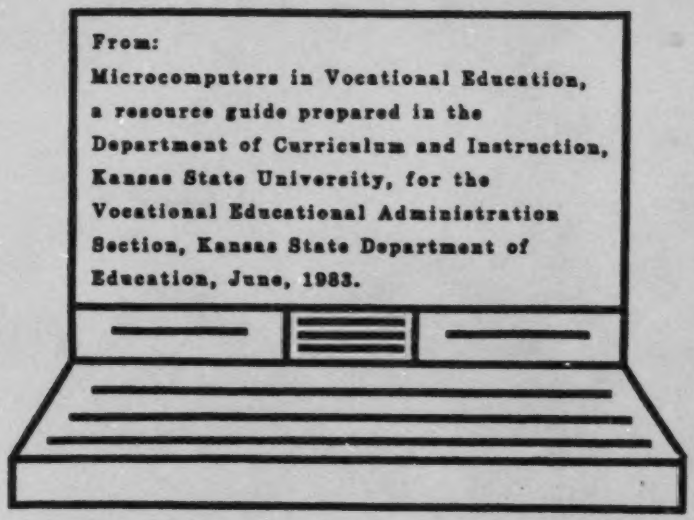
PREFACE

The resource listings and summaries of the status of use of microcomputers in the various disciplines of vocational education which comprise this document were compiled over a period of one year and finalized in March, 1983. Even during the brief period we were working on the report, we were confused and amazed by the rapid changes in the microcomputer field. Software publishers and distributors move, merge, fold, and/or change their names. Certain software is advertised in one source by one name and in another source by a different name, while other software may have a name virtually identical to a third.

All this is by way of saying that this document was as accurate as we could make it as of March, 1983, but even at that time, we were aware of some pitfalls the user might encounter. This document will be outdated before it is used, and difficulties in its use will increase with the passage of each month because of outdating.

In spite of this caution, the guide is full of useful resource material. The introductory section, "General, Background, Futuristic Considerations of Microcomputers in Vocational Education," includes several useful suggestions for the user to stay current in the field as the usefulness of the resource guide is exhausted.

Many persons helped in the preparation of the document. Special thanks is due to the vocational education specialists in the Kansas State Department of Education and especially to Susan Owen, project liaison. The cooperation of vocational educators across the state was of immense help in limiting the software lists and in identifying the local resources cited in the text. The rapid preparation of the manuscript was enabled by the typing skills of Marcia Ashford, Lois Brunmeier, Marilyn Sharp, and Alice Sweany.


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

MICROCOMPUTERS IN VOCATIONAL EDUCATION

Table of Contents

General, Background, Futuristic Considerations.....A-1

The Uses of Microcomputers in Agricultural Education.....B-1
Agriculture Education Software for Apple.....B-3
Agriculture Education Software for Radio Shack - TRS-80.....B-13

The Uses of Microcomputers in Business Education.....C-1

The Uses of Microcomputers in Health Related Education.....D-1

The Uses of Microcomputers in Home Economics Education.....E-1

The Uses of Microcomputers in Marketing and Distributive Education.....F-1

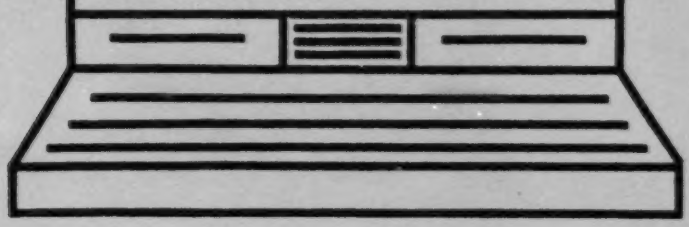
The Uses of Microcomputers in Trade and Industrial Education.....G-1

The Uses of Microcomputers in Counseling, Basic Skills, and General.....H-1

Software Sources Addresses.....I-1

Annotated Bibliography: Vocational Education.....J-1

From:
Microcomputers in Vocational Education, a resource guide prepared in the Department of Curriculum and Instruction, Kansas State University, for the Vocational Educational Administration Section, Kansas State Department of Education, June, 1983.



General, Background, Futuristic Considerations of Microcomputers in Vocational Education

The advent of microcomputers in business, in the home, and in the schools promises to make a permanent and noteworthy change in the way students learn. Both the accessibility and usability of microcomputers along with the increasing availability of high quality software indicates that teachers and students of the future will be as familiar with classroom computers as they now are with pen and paper. In an effort to assist the vocational classroom teacher to become familiar with the possibilities of microcomputers in the classroom, the Department of Curriculum and Instruction, Kansas State University, has prepared the resource guide for the Vocational Education Administration section, Kansas State Department of Education.

A survey was mailed to vocational educators in high schools and community colleges in Kansas. This survey included a list of software relative to each subject area. The educators were asked to indicate which software they were using or considering acquiring in the near future. They were also asked to describe what types of software they wanted for their field. Finally, they listed software that had been produced non-commercially, usually by themselves, for vocational courses. The software suggestions by Kansas vocational educators, software distributors, and professional vocational journals comprise the following listings of vocational education software. The source of information about each piece of software is also given for future reference.

Educators have explored and are now seriously using microcomputers for instructional purposes. It is particularly clear that hardware development, the actual capabilities of microcomputers, far exceeds software development, the programs available to run on the computers. This is particularly evident in vocational education. While there are many high quality programs being used on the farm, in the offices, the shops, and service delivery sectors, there are not similarly high quality programs for the educating of future employees. Many schools attempt to provide the same software that is used by people in the "real world". However, this is often expensive and adapted to large data sets which means it can be time consuming to have each student execute an operation.

Much of the original educational software was drill and practice routines. Some of the newer software is interactive and provides individualized tutorial and simulation activities. There has also been software designed to teach problem solving and higher level thinking skills.

To stay abreast of the recent developments in both hardware and software available in a subject area is indeed a challenge. Since this such a new, rapidly growing field, many publishers are either not making it or being incorporated into larger operations. Currently, there are several authoritative listings of microcomputer software:

Swift's 1982 Educational Software Directory
Publisher: Sterling Swift Publishing Company
Date: 1982
Price: $11.95

TRS-80 Educational Software Sourcebook
Publisher: Radio Shack
Date: 1982
Price: $4.95

Vanlove's 1983 Apple II/III Software Directory, Vol. 2
Author: Vandiver, Gerald, et. al.
Publisher: Vital Information, Inc.
Date: 1982
Price: $19.95

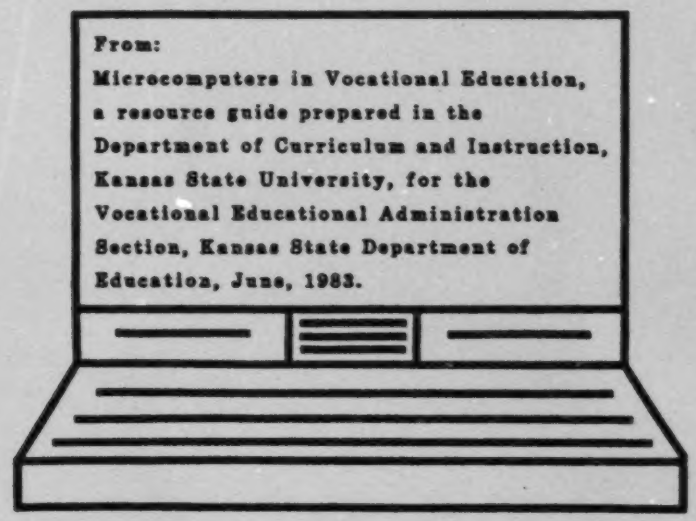
Commodore, Texas Instruments, and Zenith dealers currently maintain accurate listings of software available for their microcomputers. Professional journals in the various vocational education areas are reviewing software frequently. Instructors are using in-service days to visit schools with more complete computer operations in their area, to visit businesses using microcomputers, or to visit vendors of microcomputer hardware and software as well as to attend courses, such as "Introduction to Microcomputers in the Classroom" offered in various locations by Kansas State University. Furthermore, educators are requesting their own professional organizations to include committees, programs, and publications on microcomputers.

The future of microcomputers in the classroom holds several options. While some schools are attempting to have microcomputers in individual classrooms, others are incorporating a "micro learning lab" as part of their school library or media center. Some school districts have a mobile microcomputer lab which is scheduled in advance. Many of the educators responding to the survey on the uses of microcomputers in the vocational classroom included school or district-wide listings of software currently available. As yet, there seems to be little use of modems or connecting the microcomputer to other larger systems by telephone. The notable exception is in agriculture which has indeed led the way in computer networking. However, as more businesses begin to take advantage of this accurate, up-to-date information, more schools will do likewise.

Remote terminals which are linked to a larger computer are familiar on college campuses. However, there are also possibilities for those who cannot attend school due to ill health or extreme distances. These same advantages also apply to the working student or the student who misses classes to attend other scholastic or sport events.

Educators, counselors, and administrators are also finding many non-instructional applications for microcomputers. Routine data management, such as student accounting, fiscal management, and class scheduling are common. Testing, vocational counseling, college counseling, and values clarification are also being aided by the microcomputer. Teacher records, test development, and routine drill and practice activities, such as crossword puzzles are being individualized with the aid of microcomputers.

While these uses have significant implications for educational programming, there appears to be almost no evaluation of the potential of computers for program planning and development in education. This sharply contrasts to the business world which not only uses computers for inventory control, fiscal management tasks, and word processing, but also for planning and forecasting, resource allocation, and monitoring of project and program execution.


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Uses of Microcomputers in Agricultural Education

A survey of microcomputer use in the vocational classroom indicates extensive involvement of vocational agriculture instructors with microcomputers. Those agriculture instructors not already using microcomputers have indicated an awareness of their significance in modern agriculture, and many plan to incorporate computers in the near future.

The outstanding aspect of microcomputer use by Kansas agriculturalists is the formal and informal networks they have created. Computers in the vocational agriculture class extend beyond routine drill and practice or tutorial uses and have become tools for management and decision making.

Generally, classrooms use the same programs that are used by Kansas farmers. However, several instructors noted the amount of time required for each student to start up and establish a data base, run the program, and see its effects are not always practical in the classroom. Moreover, agriculture programs are often costly. Therefore, agricultural educators, like agriculturalists, are using shared programs such as Agnet.

There are some gaps in the types of software currently available to agricultural educators. Most frequently cited as being needed were programs dealing with:

Animal nutrition
Agriculture management
Farm field records adapted to the FFA forms
Pesticide recommendations for garden, crop, and livestock pests
Easier and better financial applications

Instruction of students in record keeping
Record keeping used by students to keep personal records
Drill and practice routines that allow the teacher to plug in different materials or concepts
All aspects of farm management using the Osborne computer

Several Kansas agriculture education instructors have developed their own materials. Clifford W. Hawk, Highland Community College, (Agriculture Department, Highland, Ks. 66035) has a copyrighted "Microcomputer Programs for Agriculture" which includes programs in animal science, agronomy, agricultural economics, and CAI programming for the TRS-80-Model 111.

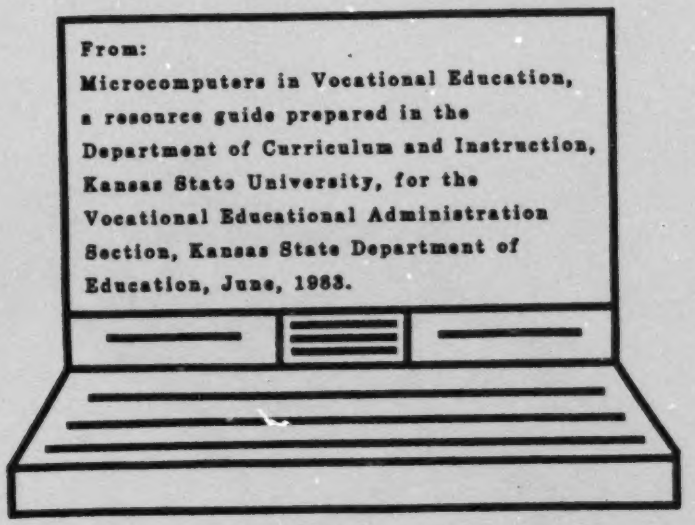
Phil Reilly, Coffeyville Community College, has developed programs for the TRS-80-Model 111 in 1) determining least cost combination of two inputs, 2) calculating adjusted weaning weights and ratios in cattle, and 3) determining break-even prices in cattle. (Phil Reilly, 200 N. Montgomery, Cherryvale, Ks. 67335).

Bob Birkenholz has developed programs on interest calculations and short and long term loans, interest and repayment. (Bob Birkenholz, Agri Business Co-ordinator, Johnson County Community College, 12345 College at Quivira, Overland Park, KS. 66210).

Larry Greene has developed programs for the Osborne on cash flow, cattle break even, feeder pig budget, and dryland crops budget. He plans to do more programs using Supercalc. (Larry Greene, Farm Business Analysis, Cloud County Community College, Concordia, Ks. 66901).

The list of agricultural software that follows is by no means exhaustive. It represents those materials included in published indexes of software as well as those materials which Kansas educators said they were using.

Some of the software has been listed under a specific computer but may in fact be available for other computers. Be sure to check with the publisher about the availability of a particular piece of software for your computer. This will also let the publishers know just what kind of software is really needed by Kansas farmers and teachers. As mentioned in the general introduction, the wise educator is familiar with directories of software such as Swift's Apple 11 Educational Software Directory, Radio Shack TRS-80 Applications Software Sourcebook, Vanloves Apple 11/111 Software Directory, and Commodore Software, as well as software advertising in agricultural magazines.


From:
Microcomputers in Vocational Education, a resource guide prepared in the Department of Curriculum and Instruction, Kansas State University, for the Vocational Educational Administration Section, Kansas State Department of Education, June, 1983.

Agricultural Education Software for Apple

NAME OF SOFTWARE: Ag-Nalysis
PRICE: $100.00
REQUIRES: Apple II/III
DESCRIPTION: One diskette contains programs providing information required for decisions related to beef feeding rations, economics of purchasing and feeding feeders, economics of crop production checklist for buying a farm, and personal financial problems. The second disk contains all cattle rations for steers and heifers at 100 lb.
AUTHOR: Micro Ag
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Agnet
PRICE: varies per program, time used
REQUIRES: varies
DESCRIPTION: Agnet is a computer located in Nebraska. Kansas participates in the system which includes both agricultural and home economics programs
AUTHOR: Contact your county extension agent or
Keith O. Zoellner
Dept. of Animal Science and Industry
KSU, Manhattan, KS 66506
SOURCE: Electronic Decision Aids Available Through Kansas State University Cooperative Extension Service MF-547 Revised

NAME OF SOFTWARE: Agricalc
PRICE: $99.95
REQUIRES: Apple II/III
DESCRIPTION: Depreciation Worksheet, Financial Statement Worksheet, cost analysis, personal budget, cash flow, interest calculations, checking account, loan schedules, vehicle data, commodities, recipes.
AUTHOR: Computerland
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: 16 Agriculture Programs ©1981
PRICE: $25.00, 5 1/4" Disk
REQUIRES:
DESCRIPTION:
AUTHOR: Vo-Ag Services
439 Mumford Hall
University of Illinois
SOURCE: Bob Birkenholz
Agricultural Business Coordinator,
Johnson County Community College

NAME OF SOFTWARE: Agriculture Vol 1
PRICE: $15.00
REQUIRES: Apple II (32K)
DESCRIPTION: Problem solving and information retrieval
AUTHOR: Minnesota Educational Computing Consortium
SOURCE: Electronic Learning. V2, N6 (March 1983), p. 58.

NAME OF SOFTWARE: Budget Analysis
PRICE: $39.95
REQUIRES: Apple II
DESCRIPTION: Evaluate cost factors associated with corn, soybeans, silage, oats, wheat, or hay.
AUTHOR: Decision Data, Inc.
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Cattle Feeding Economics
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Based on production cost of the cattle feeder.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Computerized Farm Records
PRICE: $99.00
REQUIRES: Apple II, printer
DESCRIPTION: Management information, record keeping system
AUTHOR: Micro Learningware
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Corn Harvest Losses
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Calculate corn harvest losses and analyze causes.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Corn/Soybean Management Series One
PRICE: $140.00
REQUIRES: Apple II
DESCRIPTION: Grain Storage, Harvest Loss Calculations, Crop Yield Calculator, Field Population Calculation, Planter Calitration Calculator.
AUTHOR: Harris Laboratories
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Corn vs. an Alternate Crop
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Compare economics of raising another crop to corn, assuming fixed costs for either crop are the same.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Cow-Calf Profitability
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Looks at the profitability of beef cow-calf enterprises for one production cycle.
AUTHOR: Ag-Com
SOURCE: VanLoves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Crops
PRICE: $49.95
REQUIRES: Apple II (48K)
DESCRIPTION: Crop Yields, soil erosion, etc.
AUTHOR: Ag-Com, Inc.
SOURCE: Electronic Learning. V2, N6 (March 1983), p. 58.

NAME OF SOFTWARE: Crop Yields
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Calculate yield of crops based upon number of pounds of grain harvested in a test area.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: D. B. Master
PRICE: $289.00
REQUIRES: Apple II and printer
DESCRIPTION: Versatile data management system that allows user to adapt forms to specific needs. Generate reports, mailing lists, research and reference data.
AUTHOR: Stoneware Microcomputer Products
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: 205 Day Adjusted Weaning Weights
PRICE: $49.95
REQUIRES: Apple II/III
DESCRIPTION: Purpose is to adjust weaning weight of calves so performance can help determine superior genetics in beef cow herd.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Economics of Corn Production
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Corn production tests; variables costs per bushel, fixed costs per bushel, total costs per bushel.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: F.A.R.M. (Accounting)
PRICE: $295.00
REQUIRES: Apple II, 2 disk drives, 80 column printer
DESCRIPTION: Farm record keeping package, including accounting, tax, and records management. Provide extensive reporting of cash flows, budgets, tax information, and money borrowed. Easy editing of transactions.
AUTHOR: Aurora Systems
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Farm Analyst
PRICE: $50.00
REQUIRES: Apple II
DESCRIPTION: Tells how much money you are making and if it is enough to service debts. Help identify strengths and weaknesses of your business.
AUTHOR: Harvest Computer Systems
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Farm Ledger
PRICE: $200.00
REQUIRES: Apple II+
DESCRIPTION: A bookkeeping system designed specifically for farmers. Modified single-entry accounting allows easy-to-understand entry of income and expense items using categories which can be user defined by name, type. Checks can be written on printer. Monthly and yearly reports can be generated. Interfaces with other Harvest Computer System Software.
AUTHOR: Harvest Computer Systems
SOURCE: Vanloves Apple II/III Software Directory, 1983

NAME OF SOFTWARE: Farm Management Decisions
PRICE: $59.95
REQUIRES: Apple II
DESCRIPTION: Five programs provide information required for decisions related to equipment purchases, grain sales, cost of ownership, land purchase analysis, grain interests costs.
AUTHOR: Decision Data, Inc.
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Farm Program
PRICE: $149.00
REQUIRES: TRS-80 (49K), Apple II (48K)
DESCRIPTION: Farm Records and Expenses; farmware reports
AUTHOR: Microlearningware
SOURCE: Electronic Learning, V2, No. 6 (March 1983), p. 58.

NAME OF SOFTWARE: Farrow-to-Finish Swine Production
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Calculate necessary price to cover fixed and variable costs, profit costs, profit, return to management, returns to capital and labor, etc.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Feeder
PRICE: $50.00
REQUIRES: Apple II
DESCRIPTION: Evaluate cattle feeding decision. Calculates cost per pound of gain, break even selling and purchasing price, and net return.
AUTHOR: Agricultural Management and Economic Consulting
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Feeder Pig Production
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Calculates necessary prices to cover fixed and variable costs, profit and return management, etc.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Field Population
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Calculate (1) population of a field based upon the number of plants in a test area (2) the number of plants needed per ten feet of row to achieve a given population.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Field Size
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Calculate (1) size of rectangular fields based upon length and width measurements, (2) width of field needed to obtain a field of a given number of acres.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Finishing Feeder Pigs
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Analyze purchasing and finishing of feeder pigs as to profitability, and price needed to cover costs, variable costs, profit and return to management.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: The Home Accountant
PRICE: $79.95
REQUIRES: Apple II+, printer
DESCRIPTION: Tracks up to 100 budget categories, 5 different checking acounts, credit cards. Prints checks, net worth, financial statement, and produces graphs showing actual vs. budgeted expenses, trend line analysis.
AUTHOR: Continental Software
SOURCE: Continental Software

NAME OF SOFTWARE: Liming Soil
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Results of soil test plus analysis of lime material used to determine number of pounds of lime material needed.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Liquid Manure and Fertilizer
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Uses soil test results and results of analysis of liquid manure to determine the amount of liquid manure to be applied to soil and amount of fertilizer skill needed.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Livestock
PRICE: $49.95
REQUIRES: Apple II (48K)
DESCRIPTION: Cattle feeding economics, cow-calf profitability, etc.
AUTHOR: Ag-Com
SOURCE: Electronic Learning V2 (March, 1983), p. 58.

NAME OF SOFTWARE: Livestock Breakeven Analysis
PRICE: $59.95
REQUIRES: Apple II
DESCRIPTION: Cattle break even analysis, swine break even analysis
AUTHOR: Decision Data, Inc.
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Profit & Loss
PRICE: $50.00
REQUIRES: Appple II, printer
DESCRIPTION: Constructed for the classroom with the teacher in mind. Involves basic economic principles. Deals with the profitability of a company by changing product prices and budgets. Time spent on the machine is approximately 3 minutes per student. Great for business or agribusiness classes.
AUTHOR: McGraw-Hill
SOURCE: Swifts 1982 Educational Software Directory.

NAME OF SOFTWARE: Net Energy for Feedlot Cattle
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Evaluate the performance potential of energy available in a given ration. Estimate expected average daily gain in pounds per day based on net energy system developed by Lofgreen and Associates
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Protein Balancing for Feedlot Cattle
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Evaluate the metabolizable protein available n a given ration and determine the amount of supplemental protein required for feedlot cattle.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Selling Wet Corn vs. Dry
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Compares selling wet corn at harvest, selling dry corn at harvest, and drying corn and storing as to potential profitability.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Sheep Production Economics
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: After inputting estimated costs, this program calculates the break even selling price of lambs, the return to labor, capital and management, the cost and returns.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Soybean Harvest Losses
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Based on PM-573 "Profitable Soybean Harvesting" from Iowa State University Co-op Extension Service
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Swine Ration Analysis
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Compare 1979 NRC swine nutrient requirements to calculated analysis for a given swine ration; analyzes crude protein, calcium, phosphorous.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

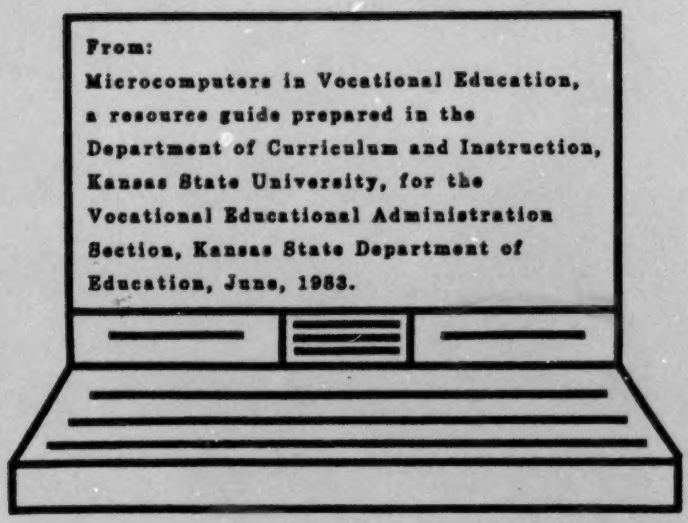
NAME OF SOFTWARE: Swine Ration Formulation
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Compare ration to 1979 NRC swine nutrient requirements, balances a ration for crude protein and give calculated analysis for crude protein, lysine, calcium, and phosphorous.
AUTHOR: Ag-Com
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: The Calendar
PRICE: $50.00
REQUIRES: Apple II (optional printer)
DESCRIPTION: Help schedule and monitor upcoming events and work tasks.
AUTHOR: Harvest Computer Systems
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Visicole
PRICE: About $300.00
REQUIRES: Apple, Atari, Commodore, Hewlett-Packard
DESCRIPTION: An electronic worksheet available for most computers, compatible with many other software programs.
AUTHOR: Visicorp, or local dealers
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Visicole Agri-Data
PRICE: $150.00
REQUIRES: Apple II
DESCRIPTION: Calculates farm budgets, income taxes, cost estimates and sales projections.
AUTHOR: The Computer Center
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: The Word Handler II
PRICE: $139.00
REQUIRES: Apple II
DESCRIPTION: Word processing program that does not require hardware modifications. Two character formats, all functions seen on the screen, underlining, superscript, proportional spacing, justification and more.
AUTHOR: Silicon Valley System, Inc.
SOURCE: Vanloves, 1983 Apple II/III Software Directory, 1983


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Agricultural Software for Radio Shack - TRS-80

NAME OF SOFTWARE: Farm Enterprise Projections
PRICE: $39.95 disk, cassette
REQUIRES: Mod 2 - 32K, 1 disk or Mod 3-16K- 1 disk TRS-80
DESCRIPTION: Projects income from cotton, wheat, cow-calf stockers, feeder, hay, operations.
AUTHOR: Agri-Computer Systems
SOURCE: TRS-80 Applications Software Book - Cat. No. 26-2114

NAME OF SOFTWARE: Farm Field Records
PRICE: $125.00 disk
REQUIRES: Mod 1-Lev 2-32K-1 disk or Mod 3-32K-1 disk, TRS-80
DESCRIPTION: Maintain individual field records. Categories include herbicides, insecticides, lime, different types of fertilizer, cost of seed, irrigation cost.
AUTHOR: The Electric Farm
SOURCE: TRS-80 Application Software Book - Cat. No. 26-2114

NAME OF SOFTWARE: Farm Simulator
PRICE: $19.95 cassette
REQUIRES: Mod 1- Lev 2-16K
DESCRIPTION: Lets farmer simulate farm finances into the future based on present financial conditions and random weather and price factors. Specify Beef or Hog farm.
AUTHOR: Duane Bristow
SOURCE: Radio Shack TRS-80 Educational Software Sourcebook - Cat. No. 26-2756

NAME OF SOFTWARE: Cattle Expense Program
PRICE: $50.00, Cassette
REQUIRES: Mod 1 - Lev 2-16K TRS-80
DESCRIPTION: Prints out all expenses, pounds and prices each feed, days on feed, feed conversion, cost/lb. gain, overall cost/lb. gain, breakeven price, and more
AUTHOR: Jeffrey Moll
SOURCE: TRS-80 Applications Software Book - Cat. No. 26-2114

NAME OF SOFTWARE: Cattle Feeding, Cost and Breakeven
PRICE: $10.00 cassette
REQUIRES: Mod 1, Lev 2, 16K - TRS-80
DESCRIPTION: Provide for input of animal, feed and other costs. Compute profit and selling price to yield desired profit.
AUTHOR: Wait Cattle Co.
SOURCE: TRS-80 Application Software Book - Cat. No. 26-2114

NAME OF SOFTWARE: Cattle Weaning, Feeding and Land Analysis
PRICE: $12.00 cassette
REQUIRES: Mod 1 - Lev 2 16K
DESCRIPTION: Several programs including weaning and yearling weights determination. Cattle feeding worksheet and land purchase analysis. All self prompt.
AUTHOR: Wait Cattle Co.
SOURCE: TRS-80 Applications Software Book - Cat. No. 26-2114

NAME OF SOFTWARE: Farmacct.
PRICE: $99.95 disk
REQUIRES: Mod 1 - Lev 2-32K - 2 disk, printer
DESCRIPTION: Bookkeeping system for farmers, keeps track of income expense plus machinery purchased, prints out list of any item year to date or by month. Net income statements.
AUTHOR: Fred's Micro-Ware
SOURCE: TRS-80 Applications Software Book - Cat No. 26-2114

NAME OF SOFTWARE: Farm Budget Crop Cost and Returns
PRICE: $100.00 cassette, $150.00 disk
REQUIRES: Mod 1 - Lev 2 - 16K
DESCRIPTION: Takes crop input cost, planting cost, fixed cost, harvest cost, gives a 5 year high low average, net profit or loss. Simple to use with printer or video.
AUTHOR: Duane Bristow
SOURCE: TRS-80 Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Farm Software Package
PRICE: $69.95 cassette, disk
REQUIRES: Mod 1-Lev 2 - 16K or Mod 3-16K
DESCRIPTION: Six programs increase farm efficiency. Depreciation, economic ordering quantity, borrowing money, break even point analysis, corn harvest record, discounting, cash flow.
AUTHOR: Horizons Unlimited
SOURCE: TRS-80 Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Feed Mix Batching
PRICE: $100.00 cassette, disk
REQUIRES: Mod 1 - Lev 2 - 16K TRS-80
DESCRIPTION: Input 90 of each ingredient, starting increment and ending batch size. Absolute and and cumulative scale weights, rounds, handles 7 ingredients, or more.
AUTHOR: Agri Ware, Inc.
SOURCE: TRS-80 Application Software Book - Cat No 26-2114

NAME OF SOFTWARE: Feed Ration and Batch Sheet
PRICE: $50.00 cassette
REQUIRES: Mod 1 - Lev 2-16K TRS-80, Printer optional
DESCRIPTION: Tells potential rate of gain, lbs. protein needed, calcuim and phosphorus content. Print out batch sheet for feeding cattle.
AUTHOR: Jeffrey Noll
SOURCE: TRS-80 Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Feed Ration Pricing and Protein Calculation
PRICE: $70.00 disk
REQUIRES: Mod 1- Lev 2 - 48K 1 disk or Mod 3-32K disk
DESCRIPTION: Stores up to 100 feed formulas and 75 ingredients. Calculates price increase with market fluctuation. Gives protein fat fibre total digestible nutrients by % of content.
AUTHOR: Broussard Feeds, Inc.
SOURCE: TRS-80 Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Poultry Egg Production & Feed Conversion
PRICE: $99.95
REQUIRES: Mod 1 - Lev 2 - 48K 1 disk, Mod 3 - 48K - 1 disk, printer optional
DESCRIPTION: Calculates feed in cost/dz and lb/dz. Keeps production and grade records. Prints reports for period-to-date, period of interest, etc., allows flock comparison by date, week of production, etc.
AUTHOR: John F. Zeiller
SOURCE: TRS-80 Application Software Book - Cat No 26-2114

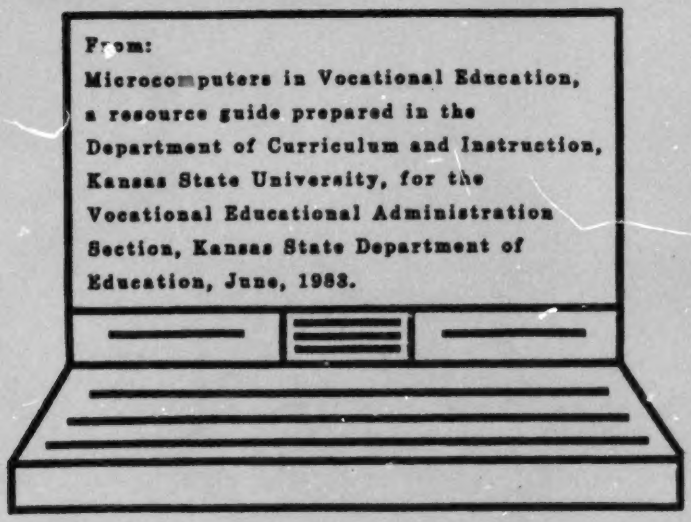
NAME OF SOFTWARE: Sheep Flock Analysis
PRICE: $20.00 cassette
REQUIRES: Mod 3-16K
DESCRIPTION: Predicts performance of individual lambs and ewes based on fleece weight, multiple births, rate of weight gain. Summarizes for the flock by ram. Allows intelligent culling/sales price of ewes, lambs, rams.
AUTHOR: Henry Moseley
SOURCE: TRS-80 - Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Soybean Cost Per Acre
PRICE: $19.95 cassette
REQUIRES: Mod 1 Lev 2 - 16K
DESCRIPTION: Cost per acre for growing soybeans.
AUTHOR: Fred's Micro-Ware
SOURCE: TRS-80 - Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Swine Breeding Herds Records Program
PRICE: $29.95
REQUIRES: Mod 3 - 32K - 1 disk
DESCRIPTION: Calculate Herd Average. Generate a labor schedule. 500 sow maximum
AUTHOR: Ed Thayer
SOURCE: TRS-80 - Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Farm Database - Income and Expense File
PRICE: $95.00 disk
REQUIRES: Mod 1 - Level 2 - 32K - 1 disk
DESCRIPTION: Series of 3 programs for complete or user defined database. Up to 9 ID codes & up to 9 amount codes & remarks for each entry. Matrix summation for IRS form 1040 F, data edit & subfile by keywords.
AUTHOR: Duane Bristow
SOURCE: TRS-80 Applications Software Book - Cat No 26-2114

NAME OF SOFTWARE: Farm Database - Income & Expense Records
PRICE: $95.00 disk
REQUIRES: Mod 1 - Level 2, 1 disk, or Mod 3 - 32K - 1 disk TRS-80
DESCRIPTION: Series of 3 programs for complete or user defined database. Up to 9 ID Codes & up to 9 amount codes & remarks for each entry. Matrix Summation for IRS Form 1940 F.
AUTHOR: Duane Bristow
SOURCE: TRS-80 Applications Software Book - Cat No 26-2114


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Uses of Microcomputers in Vocational Business Education

The world of business is almost synonymous with the world of computers, software, word processing, and spreadsheets. The incredible impact of computers on our society occurred first in the world of business and is still making monumental increases in efficiency, accuracy, and ease of information storage and retrieval.

Virtually all of the vocational business education teachers responding to a survey by Kansas State University on the types of educational software used in their programs indicated they had micrcomputers and were acquiring software. Generally, the business educators try to use the same programs that are being used in the offices in their general area. This means that some business education programs will have a complete hardware and software system devoted to word processing alone. However, this is expensive and not as flexible as using a microcomputer and various pieces of software for a classroom situation. Furthermore, there are many tutorial and simulation programs available for business education classes.

Because of the overwhelming quantity of software available to business educators, the following software listing has been broken into these broad categories:

-General
-Accounting
-Business Communication
-Typing
-General Ledger/Spread Sheets
-Word Processing

Much of the software is available for more than one type of microcomputer. There is also a wide range of price, effectiveness, and magnitude of the business software. These categories reflect the general nature of the programs most frequently cited by business educators. There is, however, a large quantity of software for data bases, graphic designs for business, statistical analysis, inventory control, and a host of other applications. There is also a large quantity of software which relates to specific businesses, such as insurance agent, tax assessment, realtor, or legal clerk.

Some software cited by vocational business instructors also was cited by marketing and distributive educators (software dealing with economics, interactive games which apply economics principles), vocational home economics (consumer issues, personal finances), and vocational counseling (basic skills, career counseling).

Projections concerning the design of the office of the (not so distant) future include several broad generalizations. Most products and services will fall into three categories: information processing, information retrieval, and information transfer. These will likely be accomplished at the electronic work station and/or using the local area network.

Information processing is word processing advanced to transmit letters or reports to a network of connected processors or to communicating office copiers. While there are many forecasts of voice operated word processors, the immediate prospects indicate that people involved in business should be familiar with keyboarding.

Information retrieval, based on electronic filing, is going to save paper, time, and frustration. The electronic filing may be done on microfiche, computer tapes, microcomputer disks, video disks, or on-line computer memories.

Information transfer is still in the developmental stage. Essentially, information will be transferred through video terminals, possibly using telephone connections, as it is being processed. The transferred information may either be received immediately or stored for the convenience of the receiver similar to telephone answering machines.

While some or all of the futurists' predictions may alter significantly, it is safe to assume tomorrow's office will be different from today's. Vocational business educators and students should continue to prepare for the changes.

Software for Vocational Business Education

General

NAME OF SOFTWARE: Business Programs
PRICE: Public domain
REQUIRES: Apple II
DESCRIPTION: A series of 25 business programs
PUBLISHER: Curriculum Publications Clearinghouse
SOURCE: Publisher promotional material

NAME OF SOFTWARE: Cartels and Cutthroats
PRICE: $39.95
REQUIRES: Apple II, 48K
DESCRIPTION: Business strategy simulation
PUBLISHER: Strategic Simulations
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Data Entry Activities for Microcomputers
PRICE: $20.00 Disk, $3.96 Manual
REQUIRES: TRS-80 Model 1 - 32K - 1 Disk - Level II Basic
DESCRIPTION: Explanation and keyboarding practice of ten common basic applications develop skills needed to complete data entry activities on the job. Speed and accuracy recorded and analyzed for each activity.
PUBLISHER: South-Western Publishing Company
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Discount, Taxes, Salaries and Profits
PRICE: $270.00 or $60.00 a lesson
REQUIRES: Apple II
DESCRIPTION: Presents discount, taxes, commission, interest, profit and loss; increase and decrease. Requires 3-5 hours of user time.
PUBLISHER: BLS, Inc.
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Mail V
PRICE: $80.00
REQUIRES: TRS-80, 48K Disk for Model III, Printer
DESCRIPTION: Mailing list will search and sort addresses, check for duplicate labels
PUBLISHER: Scholastic Incorporated
SOURCE: Scholastic Microcomputer Instructional Materials 1982-83

NAME OF SOFTWARE: Numeric Data Entry Practice (26-2601)
PRICE: $39.95 Disk
REQUIRES: TRS-80 Model 1/III-32K-1 Disk-Level II-Model III Basic
DESCRIPTION: Twenty-five lesson practice course designed to develop speed and accuracy in the 10 key entry of numeric data. As each student works through exercises, performance report is placed on disk for review by teacher or printing out using a printer.
PUBLISHER: University of Arizona
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Office Careers
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette Educational Cartridge
DESCRIPTION: Sixteen lessons covering topics such as: Office Careers, Office Assistant, Handling Communications, Filing, Word Processing, Spelling.
PUBLISHER: Dorsett Educational Systems
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol 1, No 1

NAME OF SOFTWARE: Vocabulary Series
PRICE: $168.00
REQUIRES: Commodore Cassette; Apple II 3.3; 48K; Disk Drive; TRS-80 Color Computer, Disk Drive
DESCRIPTION: Twenty-four programs containing 72 lessons dealing with words commonly found in daily newspapers and weekly news magazines.
PUBLISHER: Micro Learningware
SOURCE: Publisher promotional material

Accounting

NAME OF SOFTWARE: Accounting Exam
PRICE: $23.95
REQUIRES: TRS-80 Model I/III-16K, Level II/Model III Basic
DESCRIPTION: Gives students an accounting test on the computer. Questions appear in a different order each time the program runs. Test is scored and timed. Missed questions are reviewed. Add new questions with data statements.
PUBLISHER: Gregg/McGraw-Hill
SOURCE: Radio Shack Applications Software Sourcebook, Cat. No. 26-2114

NAME OF SOFTWARE: Accounting System
PRICE: $195.00
REQUIRES: TRS-80 Mod 1, Level 2-32K-2 Disk; Mod 3-32K-2 Disk
DESCRIPTION: Complete interactive accounting system including accounts receivable, accounts payable, payroll and general ledger.
PUBLISHER: Tomorrows Numerics, 5201 Evandale Drive, Enid, OK 73701
SOURCE: Radio Shack Applications Software Sourcebook, Cat. No. 26-2114

NAME OF SOFTWARE: Automated Accounting for Microcomputer
PRICE: $20.00
REQUIRES: TRS-80, Model I,II,III or Apple II+, Basic, 32K
DESCRIPTION: A stand alone package for Century 21 Accounting, Third Edition. Includes general ledger, accounts receivable and payable, and payroll. May be used for problems in text or for workbook-text to process accounting data.
PUBLISHER: Southwestern Publishing Company
SOURCE: Radio Shack TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Business Ed. Package I
PRICE: $24.95
REQUIRES: Apple Disk 3.3; TRS-80 Model 1 Disk Drive; Commodore Cassette
DESCRIPTION: (1) Loan Amortization (2) Bank Reconciliation (3) Stock Market Simulation (4) Depreciation
PUBLISHER: Micro Learningware
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol 1, No 1

NAME OF SOFTWARE: Business Ed. Package II
PRICE: $24.95
REQUIRES: TRS-80 Model I, Disk Drive; TRS-80 Model II, Disk Drive; TRS-80 Cassette I & K
DESCRIPTION: (1) Accounting I - Basic Accounting Concepts (2) Accounting II - introduces journals and ledgers (3) General Ledger - provides a simulated computerized ledger system (4) Annuities - calculates the amount of time that an invested amount will last based on interest rate, amount withdrawn.
PUBLISHER: Micro Learningware
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol 1, No 1

NAME OF SOFTWARE: Business Ed. Package III
PRICE: $24.95
REQUIRES: RSI/RSIII, 32K, Disk or Apple II, 32K, Disk
DESCRIPTION: A general ledger accounting system for charting accounts, making financial statements and journal entries.
PUBLISHER: Micro Learningware
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol 1, No 1

NAME OF SOFTWARE: Business - Volume I
PRICE: $30.00
REQUIRES: Apple II Disk
DESCRIPTION: Contains (1) Bank-Calculate interests and loans (2) Calculate simple and compound interest (3) Loan - prints loans amortization tables (4) Manage - simulation of running a business (5) Money - monetary principles (6) Payroll - typing
PUBLISHER: MECC
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Business Volume 3
PRICE: $49.95
REQUIRES: Apple 48K, Disk Drive
DESCRIPTION: Presents a computerized accounting system: accounts, vendors, outstanding vouchers, customers, outstanding invoices and inventory items.
PUBLISHER: Scholastic, Inc.
SOURCE: Scholastic Microcomputer Instructional Materials 1982/83

NAME OF SOFTWARE: Decision Making in Accounting
PRICE: $350.00
REQUIRES: TRS-80-Model III-32K-I Disk-Mod III Basic
DESCRIPTION: Students apply accounting principles and procedures to making business decision with the assistance of the computer.
PUBLISHER: Gregg/McGraw-Hill
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: A Microcomputer Testing Program for Accounting: Systems and Procedures, Fourth Edition
PRICE: Varies
REQUIRES: Apple II Disk, TRS-80 Model II Disk, Commodore PET Disk
DESCRIPTION: Offers a multiple choice test for each chapter, covering vocabulary and concepts.
PUBLISHER: Gregg/McGraw-Hill
SOURCE: Publisher promotional materials

Business Communications

NAME OF SOFTWARE: Business Communications
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette and Educational Cartridge
DESCRIPTION: Sixteen lessons covering areas such as: Basic Psychology of Business; Oral Communications; Effective Writing; Writing Skills; Illustrating Reports, Business Reports.
PUBLISHER: Dorsett Education System
SOURCE: Publisher promotional materials

NAME OF SOFTWARE: Punctuation
PRICE: $56.00
REQUIRES: Apple 3.3 Disk Drive; Commodore Cassette; TRS-80 Color Computer and Disk Drive
DESCRIPTION: A series of eight programs that present drill and practice material. The student is required to identify errors. Management procedure provides feedback as to learner's progress.
PUBLISHER: Micro Learningware
SOURCE: Publisher promotional materials

Typing

NAME OF SOFTWARE: Gregg Keyboarding for Information Processing
PRICE: Varies, contact publisher
REQUIRES: TRS-80 Model III (TRS DOS 1.3); Apple II+ (DOS 3.3)
DESCRIPTION: Teaches efficient keyboarding skills necessary for careers in computer science, data processing, accounting, and other fields.
PUBLISHER: Gregg/McGraw-Hill
SOURCE: Publisher promotional materials

NAME OF SOFTWARE: Microtyping
PRICE: $10.95
REQUIRES: Apple II
DESCRIPTION: Features touch method of learning to type for improving typing skills. Level 1 presents home keys, Level 2 practices numbers and symbols, Level 3 introduces words, Level 4 introduces text and program lists.
PUBLISHER: Hayden Book Company
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Typemaster
PRICE: $60.00
REQUIRES: Apple II, 48K
DESCRIPTION: Designed for classroom use to teach touch typing. Instructor must enter drill material with a word editor and set speed and accuracy objectives. Remedial drills are automatically formed and presented for student use.
PUBLISHER: Fullmer Associates
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Typing
PRICE: $19.95
REQUIRES: Apple II
DESCRIPTION: Finger placement and drill
PUBLISHER: Teck Associates
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Typing Teacher
PRICE: $19.95
REQUIRES: Apple II
DESCRIPTION: Drill and practice through eight phases of instruction, behavioral learning principles to teach keyboarding.
PUBLISHER: Computations
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Typing Tutor
PRICE: $24.95
REQUIRES: Apple II
DESCRIPTION: Self-teach typing with time response monitoring. Can create individualized drills for increasing user's skill and accuracy.
PUBLISHER: Microsoft Consumer Products
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

General Ledger/Spreadsheets

NAME OF SOFTWARE: Desktop Plan II
PRICE: $200.00
REQUIRES: Apple II, 48K
DESCRIPTION: Financial planning, budgeting and analysis package that guides user from layout of financial model through computerized calculations to final printout of a report. Ability to receive data from Visicalc.
PUBLISHER: Personal Software, Inc.
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: General Ledger
PRICE: $140.00
REQUIRES: Apple II, Printer
DESCRIPTION: Complete accounting system. Up to 500 accounts, 500 transactions per month. Prints checks and mailing labels, produces reports.
PUBLISHER: Spectrum Software
SOURCE: Vanloves 1982-83 Apple II/III Software Directory

NAME OF SOFTWARE: Versaform
PRICE: $389.00
REQUIRES: Apple II, 64K, Disk; Apple III, 128K, Disk
DESCRIPTION: Develops business form on display screen. Prepares analytic and management reports. Tutorial package can be used with students.
PUBLISHER: Applied Software Technology
SOURCE: Instructor 1982-83 Computer Directory for Schools

NAME OF SOFTWARE: Visicalc
PRICE: Consult dealer ($200 +/-)
REQUIRES: Apple, Atari, Commodore, Radio Shack (printer optional)
DESCRIPTION: Electronic worksheet for mathematical computations
PUBLISHER: Visicoys or Scholastic Software
SOURCE: Publisher promotional materials

Word Processing

NAME OF SOFTWARE: Apple Writer
PRICE: $75.00
REQUIRES: Apple II, 32K, printer
DESCRIPTION: Text editing
PUBLISHER: Apple Computer, Inc.
SOURCE: Swift's 1982 Educational Software Directory, Apple II Edition

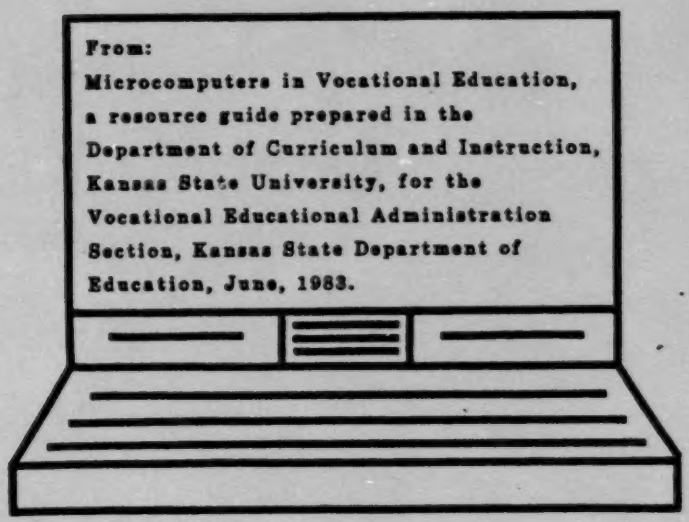
NAME OF SOFTWARE: The Electric Pencil
PRICE: $89.95
REQUIRES: TRS-80, 32K, Disk
DESCRIPTION: Word processing program
PUBLISHER: Scholastic, Inc.
SOURCE: Scholastic Microcomputer Instructional Materials 1982-83

NAME OF SOFTWARE: PET Word Processing
PRICE: 8K Version - Cassette $34,95; 16/32K Version - Cassette $45.95;
Disk $56.95
REQUIRES: PET 8K or 16/32K with printer
DESCRIPTION: Permits flexible composing and printing documents with a variety of controllable parameters.
PUBLISHER: K-12 Micro Media
SOURCE: Publisher promotional materials

NAME OF SOFTWARE: Screenwriter II
PRICE: $129.95
REQUIRES: Apple II, 48K, Printer
DESCRIPTION: Word processing of professional quality yet easy to use.
PUBLISHER: On Line Systems
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Scripsit/Tape
PRICE: $69.95 Cassette
REQUIRES: TRS-80 Model 1-Level 2-16K
DESCRIPTION: Tape based word processor
PUBLISHER: Radio Shack
SOURCE: Radio Shack, TRS-80 Applications Software Sourcebook, Cat. No. 26-2114

NAME OF SOFTWARE: Super Text
PRICE: $175.00
REQUIRES: Apple, 48K with Applesoft, Disk
DESCRIPTION: A word processing system which is relatively easy to use.
PUBLISHER: Muse Software
SOURCE: Scholastic Microcomputer Instructional Materials 1982-83


From:
Microcomputers in Vocational Education, a resource guide prepared in the Department of Curriculum and Instruction, Kansas State University, for the Vocational Educational Administration Section, Kansas State Department of Education, June, 1983.

Uses of Microcomputers in Health Related Occupations

Microcomputers are being used extensively in health occupations for patient monitoring, record-keeping, inventory control, billing, admissions, and diagnostic guides. Some of these programs are simple routines that can be acquired on the job as they are needed. However, the health related occupations are predicting a significant increase in the use of microcomputers in all phases of patient care. Basic keyboarding is becoming a necessity.

As yet, microcomputers are not having a significant impact on educating for vocational health occupations. Nevertheless, respondents to the Kansas State University survey on the use of software indicated they were planning to acquire microcomputers and software in health occupations in the near future.

The software currently available relating to educating for health occupations includes interactive programs that require the student to input patient information and make diagnostic or treatment statements while the program monitors the adequacy of the information and appropriateness of the interpretation. There are also programs which are units of study including pre- and posttests and structured lessons. Many programs are good drill and practice or review exercises.

Health Occupations Software for Apple

NAME OF SOFTWARE: Anatomy Quiz
PRICE: $19.95 per volume
REQUIRES: Apple II
DESCRIPTION: Formulate questions as it goes, giving you literally thousands of different questions in anatomy. The quiz consists of multiple choice, multiple-multiple choice, and matching. It is available in 7 volumes: Muscles of the Head & Neck, Muscles of the Trunk, Muscles of the Extremities, Joints, Nerves, Arteries, Veins.
PUBLISHER: Professional Computer Systems
SOURCE Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Circulation System
PRICE: $29.95
REQUIRES: 32K Apple II
DESCRIPTION: Reviews circulatory system organs and then describes their interrelationships.
PUBLISHER: Micro Power & Light Co.
SOURCE: Swifts, 1982, Apple II Educational Software Directory

NAME OF SOFTWARE: Computerized Clinical Simulation
PRICE: $200.00
REQUIRES: Apple II 48K, Printer
DESCRIPTION: Place student in a clinical situation, require student to collect appropriate information and suggest treatment based on interpretation. 21 situations range from CPR to Post-Operative are included.
PUBLISHER: Media Sim, Inc.
SOURCE: Swifts, 1982, Apple II Educational Software Directory

NAME OF SOFTWARE: The Digestive System
PRICE: $29.95
REQUIRES: Apple II
DESCRIPTION: Digestive system, structure, identification, processing, absorption, etc.
PUBLISHER: Micro Power & Light Co.
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Elements of Medical Terminology
PRICE: $14.00
REQUIRES: Apple II
DESCRIPTION: Highly interactive vocabulary course trains student to build an enormous vocabulary through assembly of roots, combining forms, prefixes, suffixes. Twenty lessons.
PUBLISHER: Applied Microsystem
SOURCE: Vanloves 1983, Apple II/III Software Directory

NAME OF SOFTWARE: The Heart
PRICE: $29.95
REQUIRES: Apple II
DESCRIPTION: Circulation, blood flow structure, chambers identification, heart attack causes, detailed color graphics.
PUBLISHER: Avant-Garde Creations.
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: The Human Body: An Overview
PRICE: $80.00
REQUIRES: Apple II (16K)
DESCRIPTION: Eight topics include: Introduction to the human body, The Muscular, Digestive, Respiratory, Skeletal, Circulatory, and Nervous System, and Review Test.
PUBLISHER: Brain Box
SOURCE: Swifts , 1982, Apple II Educational Software Directory

NAME OF SOFTWARE: Medi-Sim Programmed Instructional Packages
PRICE: $200.00
REQUIRES: Apple II, 48K
DESCRIPTION: Each structional segment includes pre and post tests, behavioral objectives. Oxygen therapy, EKG, Chest Trauma Assessment and others are covered.
PUBLISHER: Medi-Sim, Inc.
SOURCE: Swifts, 1982, Apple II Educational Software Directory

NAME OF SOFTWARE: Poison Proof Your Home
PRICE: $210.00†
REQUIRES: Apple II, 48K, Disk
DESCRIPTION: Five disk program provides tutorial on categories of poisons, prevention and treatment of poisoning.
PUBLISHER: Interpretive Education, Inc.
SOURCE: Instructor, Vol. 1, No. 1, 1982-83 Computer Directory for Schools

NAME OF SOFTWARE: Programmed Instructional Package for Emergency Services Nursing and E.M.T. Personnel
PRICE: $200.00
REQUIRES: Apple II, 48K
DESCRIPTION: Patient assessment, vital signs, physical exam, oral history, triage, respiratory and diabetic emergencies, and others are covered.
PUBLISHER: Medi-Sim
SOURCE: Swifts, 1982, Apple II Educational Software Directory

NAME OF SOFTWARE: Reproductive Organs
PRICE: $29.95
REQUIRES: Apple II
DESCRIPTION: Reviews principal male and female organ functions
PUBLISHER: Micro Power & Light
SOURCE: Vanloves 1983, Apple II/III Software Directory

Health Occupations Software for Commodore/PET

NAME OF SOFTWARE: Basic First Aid
PRICE: $19.95
REQUIRES: 8K Pet and a single tape unit, works with any ROM
DESCRIPTION: Program covers life threatening situations: shock, poisoning, burns, heart attack, choking, stroke, drowning, heat emergencies, and eye injuries. Mid-Term and Final Exam included.
PUBLISHER: Bits and Bytes
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: High School Medical Technology
PRICE: $24.95 each, $300.00 set or tape, $150.00 set or disk
REQUIRES: Any Commodore PET
DESCRIPTION: Series of 20 computer-aided instruction lessons on high school medical technology. Microscopic measurement, pH, histology, blood typing, puise, blood pressure, bacteriology, much more.
PUBLISHER: American Peripherals
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: The Human Body, an Overview
PRICE: $59.95
REQUIRES: 16K PET, Commodore
DESCRIPTION: Covers skeletal system, muscular system, digestive system, respiratory system, circulatory system, nervous system, review & test.
PUBLISHER: Brain Box
SOURCE: Commodore Software Encyclopedia, 2nd Education

NAME OF SOFTWARE: The Muscular System
PRICE: $46.95
REQUIRES: 16K PET
DESCRIPTION: How muscles work, voluntary muscles, involuntary muscles, cardiac muscle, muscle fatigue, Review and Test.
PUBLISHER: Brain Box
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: The Nervous System
PRICE: $46.95
REQUIRES: 16K PET
DESCRIPTION: Hearing, Sight, Smell, Touch, Taste, Review and Test.
PUBLISHER: Brain Box
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: The Skeletal System
PRICE: $39.95
REQUIRES: 16K PET
DESCRIPTION: The central skeletal system, the limbs, ligaments/cartilage, joints, Review and Test.
PUBLISHER: Brain Box
SOURCE: Commodore Software Encyclopedia, 2nd Edition

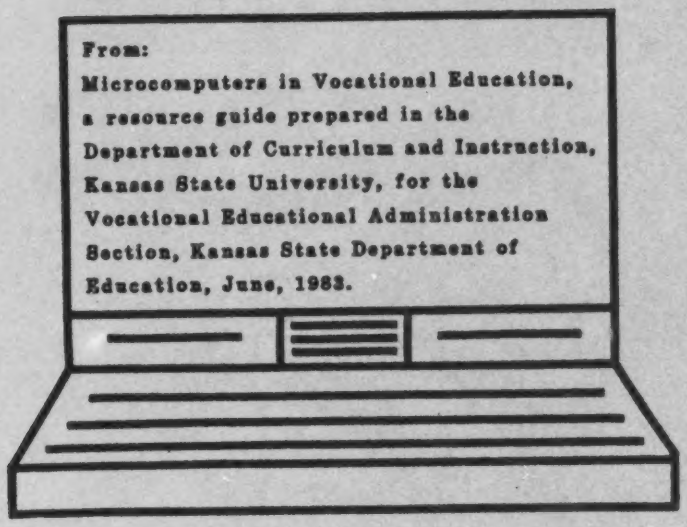
Health Occupations Software for TRS 80 ATARI

NAME OF SOFTWARE: First Aid & Safety
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette and educational cartridge
DESCRIPTION: 16 lessons covering areas such as: Basic Safety Rules, Recognition of Coronary Attack, Diabetes Emergencies, Care of Minor Cuts, Head, Eye & Ear Injuries, Chemical Burns.
PUBLISHER: Dorsett Educational Systems
SOURCE: Dorsett Educational Systems

NAME OF SOFTWARE: Health: Sante!
PRICE: $48.00 Cassette, $50.00 Disk
REQUIRES: Mod 1, Lev 2 - 32K
DESCRIPTION: Predicts lifespan, analyzes stress, and lists most significant hazards. Output to video or printer. Can be used to counsel clients regarding health related habits. Based on R. F. Allen: Lifegain.
PUBLISHER: Scarmouche, Ltd.
SOURCE: Radio Shack Applications Software Source Book, vol IV, Cat. No. 26-2114

NAME OF SOFTWARE: Health Services Career
PRICE: $79.00
REQUIRES: Atari 400 or 800 cassette & educational cartridge
DESCRIPTION: 16 lessons covering areas such as: The Medical Team, Health Professionals, Helping Patients, Sterilizing Equipment, Blood Tests, Radiology.
PUBLISHER: Dorsett Educational Systems
SOURCE: Dorsett Educational Systems

NAME OF SOFTWARE: Rehabilitation, Brain Injury/Stroke
PRICE: $195.00 cassette, disk
REQUIRES: TRS 80: Mod 1 - Lev 2 - 16K, Mod 3-16K - 1 Disk
DESCRIPTION: Seven programs and a handbook identify and treat cognitive deficits in a comprehensive program. For professionals, paraprofessional, or family member under professional guidance
PUBLISHER: Life Science Associates
SOURCE: Radio Shack Applications Software Sourcebook, Vol IV, Cat No 26-2114


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Uses of Microcomputer in Home Economics Education

Microcomputers have made a significant impact in vocational home economics education. Many of the respondents to the Kansas State University survey on the use of software in the vocational classrooom indicated they already had access to a microcomputer and were acquiring software, or had immediate plans to do so.

There is some overlap between the software relevant to vocctional home economics and other fields such as marketing (consumer issues), and business (records, filing accounts). Those sections of this report will be of interest to the vocational home economics instructor. The software in this section includes an example of a buying service which requires a modem. The use of modems is becoming very common in the areas of vocational home economics since the information or data base can be instantly altered to reflect current supplies, prices, location, etc.

There is a great deal of "junk" software relating to the home and several instructors noted there is a great need for better quality software. This list attempts to represent software recommended and used by Kansas teachers, however, there is some merit to including poorly designed or useless software in a classroom or school collection to help the students become discriminating consumers. The software included in the list is only a fraction of what is available. It has been broken into three main categories: Family Economics, Foods, and Others. Home economics instructors have requested more programs in housing, family relationships, child development, and values clarification.

Home economics instructors are designing their own programs to meet their own program goals and objectives. Brenda Doaly (USD 277, Burr Oak, Kansas 66936) has designed programs to review measuring equivalents, abbreviations used in food preparation, and terms used in clothing construction.

Vocational Home Economics

NAME OF SOFTWARE: Comparative Buying
PRICE: $165.00
REQUIRES: Requires Apple II 48K disk, TRS-80 48K
DESCRIPTION: Includes: Buying Wisely, Becoming an Informed Shopper, Understanding Sales Buying, Cash Versus Credit Buying
PUBLISHER: Learning Arts
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Family Budget
PRICE: $39.95
REQUIRES: Apple II (16K), Atari (24K)
DESCRIPTION: 28 categories
PUBLISHER: Dynacomp, Inc.
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Income Meets Expenses
PRICE: $340.00
REQUIRES: Apple II 48K, disk
DESCRIPTION: Introduces students to the concept of budgeting, income and expenses.
PUBLISHER: Learning Arts
SOURCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Money Management Assessment
PRICE: $165.00
REQUIRES: Apple II 48K, disk
DESCRIPTION: Assesses basic mathematical skills, vocabulary, and money management skills.
PUBLISHER: Learning Arts
SOUCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Oregon Trail
PRICE: Varies, contact publisher
REQUIRES: Apple 48K, Disk
DESCRIPTION: Consumer survival simulation.
PUBLISHER: MECC
SOURCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Personal Consumerism
PRICE: $235.00
REQUIRES: Apple II, 48K, disk; TRS-80 48K
DESCRIPTION: Includes tips on buying a used car, reading and advertisement, shopping in a comparative way, consumer fraud, consumer law, consumer help and understanding labels.
PUBLISHER: Learning Arts
SOURCE: Publisher's Promotional Materials

NAME OF SOFTWARE: Personal Consumer Series
PRICE: $29.95 each or $235.00
REQUIRES: Applesoft
DESCRIPTION: Comparative Shopping, Consumer Fraud, Getting Consumer Helps, Reading Ads, Consumer Laws, Buying a Used Car, Consumerism, Understanding Labels
PUBLISHER: Phillip Roy, Inc.
SOURCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Personal Finance
PRICE: $199.00
REQUIRES: Apple II 48K, disk; TRS-80 48K
DESCRIPTION: Includes: How to finance a car, money, all about interest, metrics and you and insurance, credit.
PUBLISHER: Learning Arts
SOURCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Personal Mathematics Series
PRICE: $175.00 or $29.95 each
REQUIRES: Applesoft
DESCRIPTION: How to Handle Money, Interest, Establishing Credit, Financing a Car, Nutrition
PUBLISHER: Phillip Roy, Inc.
SOURCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Using Money and Making Change
PRICE: $15.00
$42.00 Complete set of 3 cassettes
$50.00 Complete set of 1 diskette
REQUIRES: PET
DESCRIPTION: Designed for grades 2-4. Includes: Let's Look at Money; The Everyday Use of Money; If you Ran a Cookieshop
PUBLISHER: Academic Software
SOURCE: Commodore Software Encyclopedia, 2nd Ed.

NAME OF SOFTWARE: You Can Bank On It
PRICE: $285.00
REQUIRES: Apple II 48K, disk
DESCRIPTION: Concepts and rationale of a bank, depositing and withdrawing money, beginning a checking account and writing checks.
PUBLISHER: Learning Arts
SOURCE: Publisher's Promotional Materials

FOODS

NAME OF SOFTWARE: Eat Smart
PRICE: $19.75
REQUIRES: Apple II (48K)
DESCRIPTION: Nutrition Analysis
PUBLISHER: Pillsbury Center
SOURCE: Swift's 1982 Educational Software Directory

NAME OF SOFTWARE: Computing Your Way to Better Nutrition
PRICE: $30.00
REQUIRES: Apple II, Disk, 32K
DESCRIPTION: Includes graphic presentation of the sugar content of cereals, chemical food content, fast food nutritional adequacy, ROAS, and vitamin/mineral tutorial.
PUBLISHER: Learning Arts
SOURCE: Publisher's Promotional Materials

NAME OF SOFTWARE: The Digestive System
PRICE: $29.95
REQUIRES: Apple II
DESCRIPTION: Digestive system, structure, identification, processing, absorption, etc.
PUBLISHER: Micro Power & Light Co.
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Food Intake Analysis
PRICE: $36.00
REQUIRES: Apple II (32K)
DESCRIPTION: Nutrition Analysis
PUBLISHER: MECC
SOURCE: Electronic Learning, Vol. 2, No. 6 (March 1983) p. 57

NAME OF SOFTWARE: Menu II
PRICE: $39.95
REQUIRES: Apple II (48K)
DESCRIPTION: Creates and stores recipes, shopping list, plans meals
PUBLISHER: C & H Video Corporation
SOURCE: Electronic Learning, Vol. 2, No. 6 (March 1983) p. 57

NAME OF SOFTWARE: Nutri-Pack
PRICE: $39.95
REQUIRES: Apple II
DESCRIPTION: A series of programs and a data base designed to evaluate the nutritional quality of a daily diet. It contains information on the calories, fat, and protein content and the levels of 8 vitamins and minerals in 600 listed foods.
PUBLISHER: Micro-Comp, Incorporated
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: What's in Your Lunch?
PRICE: $20.00
REQUIRES: Apple II (48K) Disk; PET 8K, 16K Cassette or Disk; Atari 16 K or 32 K cassette or disk
DESCRIPTION: Analysis based on 1980 RDA's. Individualized for the user's age, height, sex, and estimate of activity. Analysis given for protein, vitamins A & C, riboflavin, calcium, iron. Fat is presented as a % of energy and sodium is analyzed relative to the dietary goals.
PUBLISHER: Lawrence Hall of Science
SOURCE: Publisher's Promotional Materials

OTHER

NAME OF SOFTWARE: The Address Book
PRICE: $49.95
REQUIRES: Apple II (48K)
DESCRIPTION: Name processing, address processing, phone number processing
PUBLISHER: Muse Software
SOURCE: Vanloves 1983 Apple II/III Software Directory

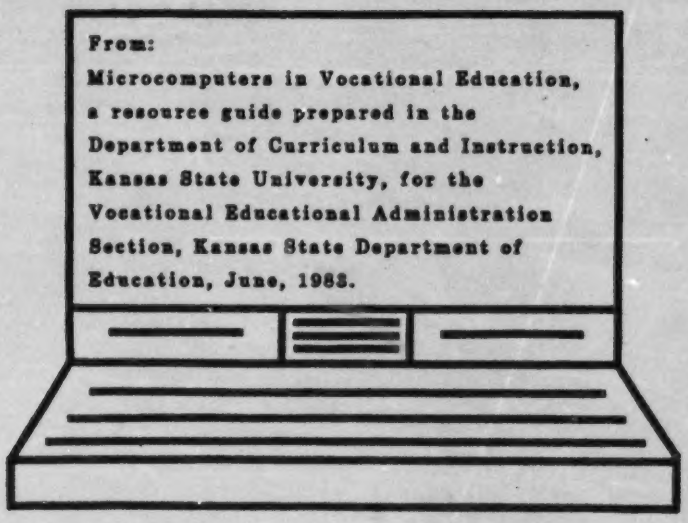
NAME OF SOFTWARE: Advertising Techniques
PRICE: Contact Publisher
REQUIRES: Apple II
DESCRIPTION: The program describes four techniques: Join the Crowd, Decide for Yourself, Remember Me, and Act Now. Includes illustrative examples, exercises, mastery quiz.
PUBLISHER: Micro Power and Light
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Comp * U * Star
PRICE: $25.00 for a 1-year membership
Connect time charges above this.
REQUIRES: Data terminal or personal computer capable of data communications-serial, asynchronous, ASCII. Virtually any terminal and 300 based modem.
DESCRIPTION: Allows one to shop and compare prices on over 30,000 products from more than 100 top quality brands. Discounts are given, home delivery, easy use of credit cards.
PUBLISHER: Comp * U * Card of America
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Energy Miser
PRICE: $29.95
REQUIRES: Apple II
DESCRIPTION: A complete heating/cooling analysis program for home or office that calculates heat loss or gain due to poor insulation. Will predict annual savings of utility bills with improvements and modifications. Calculation of energy tax credit.
PUBLISHER: Hayden Book Company, Inc.
SOURCE: Vanloves 1983 Apple II/III Software Directory

NAME OF SOFTWARE: A-1 Handy Home Hints
PRICE: 13.83
REQUIRES: Radio Shack I, Radio Shack III, 16K
DESCRIPTION: Home Management program appropriate for home economics classes. Covers personal finance, energy efficiency, shopping, cooking, home maintenance.
PUBLISHER: Modtec
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol. 1, No. 1

NAME OF SOFTWARE: Home Safe Home
PRICE: $165.00
REQUIRES: Apple II, 48K, Disk
DESCRIPTION: 4 disk program uses animated color graphics in tutorial on the characteristics and prevention of fire, shocks, falls, and poisons.
PUBLISHER: Interpretive Education, Incorporated
SOURCE: Instructor 1982-83 Computer Director for Schools, Vol. 1, No. 2

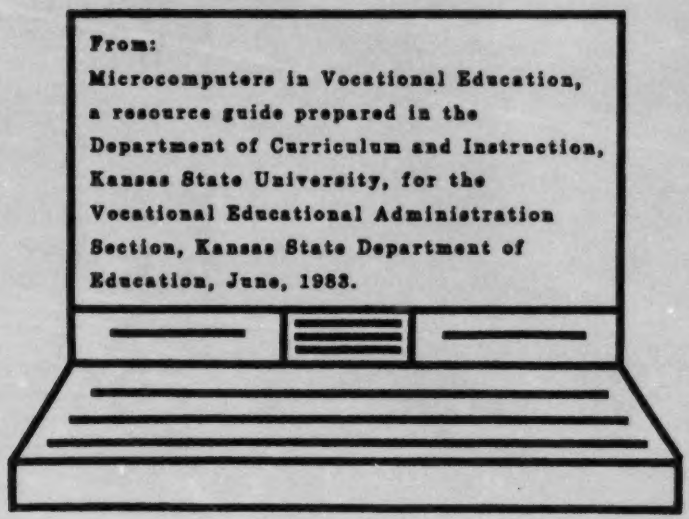

From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Microcomputers in Marketing and Distributive Education

The uses of microcomputers in marketing are so numerous and so varied that the following list is presented more as a means of highlighting the possibilities than as a total listing. Many programs have been developed which are specific to the particular business or marketing situation. Thus, there are programs for real estate management, bakery management, Amway distributors, store managers, and route planners as well as a host of others. Frequently, commercial enterprises will be using several software packages during daily operations. Many programs relevant to marketing and distributive education have also been listed under the business section of this report.

Marketing and distributive educators responding to a Kansas State University survey on the use of software in their classrooms, indicated there are many high quality programs available for use in the real world of work, but these programs are not always easily transferred to classroom learning situations. The programs used by retailers tend to be large and expensive, thus, there is a need for high quality educational software for marketing and distributive education. There are several programs that are almost games which have been designed to encourage the student to integrate information and make decisions. Some of these programs are interactive, some apply to specific business ventures, and others involve a general understanding of economic concepts.

Educators are aware of the continual growth and development in microcomputer software. Several noted the increased use of modems, interactive programs, and portable microcomputers as being difficult to incorporate into the classroom. There is also a need for more software related to scheduling.


From:
Microcomputers in Vocational Education, a resource guide prepared in the Department of Curriculum and Instruction, Kansas State University, for the Vocational Educational Administration Section, Kansas State Department of Education, June, 1983.

Software for Marketing and Distributive Education

NAME OF SOFTWARE: Bisplan
PRICE: $20.00
REQUIRES: Mod 1 - Level 1 - 16K; Model 3, 16K
DESCRIPTION: A program for making business plans and projections. Excellent classroom tool for showing dynamics of business finances and accounting. Cash flow analysis - profit and loss statement - balance sheets.
PUBLISHER: Mariah Computing
SOURCE: Radio Shack Applications Software Sourcebook, Cat. 21-2114-Vol. 4

NAME OF SOFTWARE: Business Communications
PRICE: $79.00
REQUIRES: Atari 400 or Atari 800, Dorsett's Educational System Master Cartridge
DESCRIPTION: Sixteen programs cover such things as format of business communications, handling routine pleasant and unpleasant subjects, report writing and planning.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol. 1, No. 7

NAME OF SOFTWARE: Cartels and Cutthroats
PRICE: $40.00
REQUIRES: Apple 48K, Disk
DESCRIPTION: Business strategy simulation. Students are in charge of their own multi-million dollar manufacturing firm. They deal with the problems such as: staff competition, an unsteady economy, touch labor demands, and government intervention. Manual aid to various player charts.
PUBLISHER: Strategic Simulations
SOURCE: Swifts 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Enterprise Sandwich Shops: A Marketing Simulation
PRICE: Contact publisher
REQUIRES: Apple II, 48K, Disk
DESCRIPTION: Instructor-controlled simulation uses a fictional company of sandwich shops to stimulate student interest in marketing, retailing, management, and entrepreneurship.
PUBLISHER: McGraw-Hill Book Company
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol. 1, No. 1

NAME OF SOFTWARE: Inflation Index
PRICE: $39.50
REQUIRES: Mod 2 - 64K - 1 Disk
DESCRIPTION: How many dollars in April of 1981 will it take to buy the same as five dollars in January 1960? Inflation index will produce the exact answer.
PUBLISHER: Newton, Allen S.
SOURCE: Radio Shack Applications Software Sourcebook. Cat. 21-2114-Vol. 4

NAME OF SOFTWARE: Inventory Manager
PRICE: $149.95
REQUIRES: Apple II, 2 Disks
DESCRIPTION: Deals with 2,700 different inventory items. Can list 99 vendors who supply items. Inventory Manager issues reports which summarize profit margins, calculate wholesale to retail mark ups, list back order status, recommend reorder points, print purchase orders, and more.
PUBLISHER: Synergistic Software
SOURCE: Vanloves,1983 Apple II/III Software Directory

NAME OF SOFTWARE: Lemonade: The Game of Big Business
PRICE: $19.95 Cassette
REQUIRES: TRS-80 Model 1 - 16K, Model 3 - 16K
DESCRIPTION: Business simulation. Manage a lemonade stand to maximize profits. Set purchasing, pricing, manufacturing, and advertising decisions amidst changing market conditions.
PUBLISHER: Brookstone Associates
SOURCE: Radio Shack Applications Software Sourcebook, Cat. 21-2114-Vol. 4

NAME OF SOFTWARE: Management Decisions
PRICE: $54.00 - Disk, $49.95 - Cassette
REQUIRES: TRS-80 Level II
DESCRIPTION: A management simulation program designed to teach management skills.
PUBLISHER: K-12 Micro Media
SOURCE: Radio Shack-TRS-80 Education Software Sourcebook, Cat. 26-2756

NAME OF SOFTWARE: Market Simulation
PRICE: $19.95
REQUIRES: Texas Instruments 99/4A Computer
DESCRIPTION: Places two contestants in business competition. Players choose amount of advertising, volume of production, etc. Strikes and economic change add realism.
PUBLISHER: Texas Instruments, Inc. Personal Computer Division
SOURCE: Instructor 1982-83 Computer Directory for Schools, Vol.1, No. 1

NAME OF SOFTWARE: Money! Money!
PRICE: $39.95
REQUIRES: Apple II, 48K, Disk
DESCRIPTION: This program was designed to provide practice in working with concepts involving money.
PUBLISHER: Hartley Courseware, Inc.
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Numeric Data Entry Practice
PRICE: $39.95
REQUIRES: TRS-80 Model 1-3, 32K, 1 Disk,
TRS-80 Level II, Mod 3, Basic
DESCRIPTION: Twenty-five lesson practice course designed to develop speed and accuracy in the 10-key entry of numeric data. As each student works through exercises, performance report is placed on disk for review by teacher or printing out using printer.
PUBLISHER: Radio Shack
SOURCE: TRS-80 Educational Software Sourcebook, Cat. 26-2756

NAME OF SOFTWARE: Planning Cash Flow
PRICE: $99.95
REQUIRES: Apple II
DESCRIPTION: Teaches how to predict the timing of cash flows, how to turn inventory into cash, how to manage money more efficiently.
PUBLISHER: Educational Programming Systems
SOURCE: Swifts 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Profit and Loss: A Microcomputer Simulation
PRICE: Contact publisher
REQUIRES: Apple II+, 48K, Disk
DESCRIPTION: Teacher administered simulation introduces economic concepts
PUBLISHER: McGraw-Hill Book Company
SOURCE: Instructor, 1982-83 Computer Directory for Schools, Vol. 1, No. 1

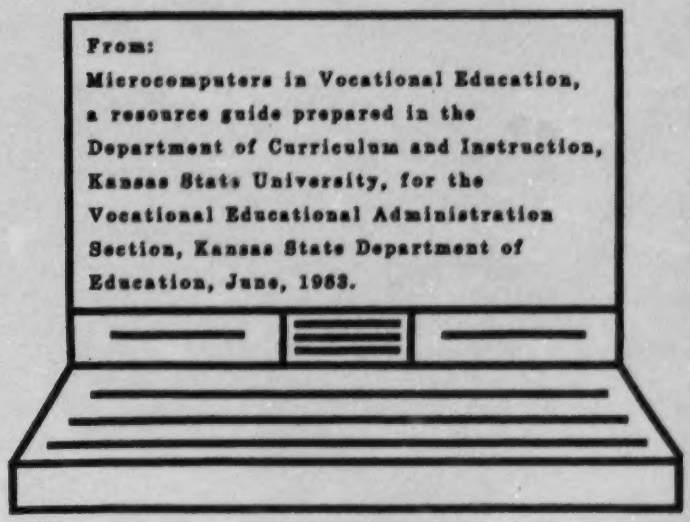
NAME OF SOFTWARE: Social and Economic Simulations CS-3204
PRICE: $24.95 Cassette, Disk
REQUIRES: Mod 1 - Lev 2 - 16K
DESCRIPTION: Deals with world's growing population and its limited resources market. Concentrate on two companies vying for more of the market and U.S. population.
PUBLISHER: Creative Computing Software
SOURCE: Radio Shack Applications Software Sourcebook, Cat. 21-21124-Vol. 4

NAME OF SOFTWARE: Supervisory Practices
PRICE: $79.00
REQUIRES: Atari 400, Cassette educational cartridge
DESCRIPTION: Sixteen lessons covering topics such as: introduction to supervision, leadership styles, planning, direction, employee discipline, communications.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Publicity

NAME OF SOFTWARE: The Store Manager
PRICE: $250.00
REQUIRES: Apple II
DESCRIPTION: A point of sale system that also provides inventory control. Produces purchase orders, receiving reports, invoices, packing slips, and quotations. Formerly called The Cashier.
PUBLISHER: High Technology, Inc.
SOURCE: Vanloves, 1983 Apple II/III Software Directory

NAME OF SOFTWARE: Travel Counselling
PRICE: $25.00
REQUIRES: Contact Commodore Dealer
DESCRIPTION: Provides student with a simulation of an airline reservation system for actual business practice in the field of Travel Counselling
PUBLISHER: Commodore, Inc.
SOURCE: 1982 Commodore Software Encyclopedia

NAME OF SOFTWARE: Versaform
PRICE: $389.00
REQUIRES: Apple II, 64K, Disk or Apple III, 128K, Disk
DESCRIPTION: Develops business form on display screen. Prepares analytic and management reports. Tutorial package can be used with students to show "how to" in business environment.
PUBLISHER: Applied Software Technology
SOURCE: Instructor, 1982-83 Computer Directory for Schools, Vol. 1, No. 1


From:
Microcomputers in Vocational Education, a resource guide prepared in the Department of Curriculum and Instruction, Kansas State University, for the Vocational Educational Administration Section, Kansas State Department of Education, June, 1983.

Uses of Microcomputers in Trade and Industrial Education

Microcomputers are increasing the precision and speed of many sectors of trade and industry. This is reflected in the widespread use of microcomputer assisted instruction in vocational trade and industrial education programs. In addition to the programs included on the following list, respondents to a Kansas State University survey indicated they are using word processing programs, electronic worksheets, accounts receivable, and inventory control programs. Information about these programs may be found in the business section of the report. Trade and industrial instructors also indicated they are using gradebooks, vocabulary, drill routine, crossword puzzle programs, and math quiz programs which are described in the vocational counseling and special needs section of this report.

Many of the trade and industrial arts instructors indicated they have developed their own programs or adapted parts of programs. The software the instructors would like to see available includes:

- Basic electronic tutorial
- Vocabulary builder for trade terms
- Service repair programs for 2-way radio
- Service repair programs for computer equipment
- Software for IBM's.

Trade and industrial educators who teach drafting have indicated microcomputers are making a tremendous impact in this area. As yet, however, no single program is consistently recommended. Instructors interested in computer-aided drafting could begin by reading the article in February, 1983 School Shop, "Implementing a Computer-Aided Drafting Program" by Schwendau and Goetsch.

Software for Trade and Industrial Education

Programs for Apple

NAME OF SOFTWARE: Automatic Diagnosis
PRICE: $19.95
REQUIRES: Apple II, Integer 16K
DESCRIPTION: Assists user in diagnosing common auto problems. Does not describe repair procedure.
PUBLISHER: Powersoft
SOURCE: Swifts, 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Designer Tool Kit
PRICE: $225.00
REQUIRES: Apple II (48K)
DESCRIPTION: mapping, graphics, tables, comes with grid overlay
PUBLISHER: Apple Computer, Inc.
SOURCE: Electronic Learning, Vol 2, No 6, March 1983, p. 56

NAME OF SOFTWARE: Driver's Education/Industrial Arts - Vol 1
PRICE: $30.00 diskette
REQUIRES: Apple II
DESCRIPTION: Driver 1, Driver 2, apply to Minnesota highways rules. Reading a micrometer; calculation for preparing rafters of buildings and stairs.
PUBLISHER: MECC
SOURCE: Swifts, 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: E-Z Draw
PRICE: $49.95
REQUIRES: Apple II
DESCRIPTION: Graphics Editor. Includes commands to print hi-res screen on the Trendum or Silentype printers.
PUBLISHER: Sirius Software
SOURCE: Vanloves 1983 Apple II/III Softare Directory

NAME OF SOFTWARE: General Program on industrial arts
PRICE: $7.50
REQUIRES: Apple II (48K)
DESCRIPTION: Drill and practice for 30 mini-programs
PUBLISHER: Minnesota Curriculum Services Center
SOURCE: Electronic Learning, Vol 2 No 6, March 1983, p. 56

NAME OF SOFTWARE: Several programs for use in industrial education
PRICE: free to teachers in Illinois, purchase by arrangement with other States
REQUIRES: Apple II, TRS-80
DESCRIPTION:
PUBLISHER: Illinois State Board of Education
Attn. Kenneth Smith, Data Systems Section
SOURCE: Electronics Learning, Vol 2, No 6, March 1983, p. 56

Programs for Commodore

NAME OF SOFTWARE: Beams
PRICE: $115.00
REQUIRES: Commodore/contact dealer
DESCRIPTION: Compute stress and deflection of a beam if given length support and load conditions, shape and dimensions (sq., rect., round, or I)
PUBLISHER: Computer House Division
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: Machine Parts Quoting
PRICE: $280.00
REQUIRES: Commodore/Contact Dealer
DESCRIPTION: Compute time and material for parts made in a machine shop using conventional machine tools.
PUBLISHER: Computer House Division
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: Pulley System-Machine
PRICE: $20.00
REQUIRES: Commodore/Contact dealer
DESCRIPTION: Generate a series of 7 questions dealing with the analysis of a pulley system consisting of single, double, or triple fixed and moveable blocks.
PUBLISHER: Microphys
SOURCE: Commodore Software Encyclopedia, 2nd Edition

NAME OF SOFTWARE: Spur Gears
PRICE: $35.00
REQUIRES: Commodore/Contact Dealer
DESCRIPTION: Computes outside diameter, pitch diameter, circular pitch, measurement over wire, chordal thickness, arc tooth thickness, involute of an angle and center distance for full depth or stut tooth external gears.
PUBLISHER: Computer House Division
SOURCE: Commodore Software Encyclopedia, 2nd Edition

Programs for TRS-80 Radio Shack

NAME OF SOFTWARE: Arc Welding for Home and Farm
PRICE: $15.50
REQUIRES: Mod 1, Lev 2, 16K Radio Shack
DESCRIPTION: Series of programs using question and answer style to teach basic fundamentals and theory of arc welding, Rod I.D., current, etc.
PUBLISHER: Sadler Enterprises Computer
SOURCE: Radio Shack Application Software Sourcebook No. 26-2114 - Vol 4

NAME OF SOFTWARE: Auto Mechanics
PRICE: $79.00, cassette
REQUIRES: TRS-80 I/II - 16K lower case level II/mod III Basic
DESCRIPTION: Full length course in 16 programs uses monitor programs.
PUBLISHER: Dorsett Educational Systems
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Builders Delight
PRICE: $14.95 Cassette
REQUIRES: Mod 3-4K TRS-80, TRS-80
DESCRIPTION: Returns list of material for 20-36 ft. wide by 20-50 ft. long, Also will estimate labor. Specify printer or video printout.
PUBLISHER: Yzaguire, Raul
SOURCE: Radio Shack Applications Software Sourcebook 26-2114

NAME OF SOFTWARE: Concrete and Blocks for Home and Farm
PRICE: $15.50
REQUIRES: Min. Req: Mod 1 - Lev 2 - 16K Radio Shack
DESCRIPTION: Teach basic fundamentals of concrete and block work
PUBLISHER: Sadler Enterprise
SOURCE: Radio Shack Applications Software Source 26-2114 - Vol 4

NAME OF SOFTWARE: Electrical Analysis 1
PRICE: $20.00 cassette
REQUIRES: Mod 1 - Lev 2 - 16K Radio Shack
DESCRIPTION: Solve simple circuits inputing amplex numbers, finds equivalent circuits, power, currents of branches and six other programs relating to graphics.
PUBLISHER: Cochran, Thomas I. Jr.
SOURCE: Radio Shack Application Software Sourcebook 26-2114 - Vol 4

NAME OF SOFTWARE: Electric circuits 1
PRICE: $9.95 cassette, $14.95 disk
REQUIRES: Mod 1 0 Lev 1 - 16K - 2 disk Radio Shack
DESCRIPTION: Self learning program in basic electricity, graphic circuit drawn and discussed (15 total). Circuits have components, coils, capacitors, fuses, resistors, rectifiers. Calculations are also made on component values.
PUBLISHER: Zalnerunas, C. J.
SOURCE: Radio Shack Application Software Sourcebook 21-2114 - Vol 4

NAME OF SOFTWARE: Electrical Wiring for Home and Farm
PRICE: $15.50 cassette
REQUIRES: Mod 1 - Level 1 - 16K Radio Shack
DESCRIPTION: Question and answer style used to teach basic fundamentals and theory of electric wiring.
PUBLISHER: Sadler Enterprise Computer
SOURCE: Radio Shack Applications Software Sourcebook 21-2114 - Vol 4

NAME OF SOFTWARE: General Shop Practices
PRICE: $79.00 cassette
REQUIRES: Model I/III - 16K - lower case - level II/model III Basic. TRS-80
DESCRIPTION: Full length course in 16 programs, uses monitor program, supplied.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: TRS-80 Educational Software Sourcebook, Cat No 26-2756

Programs for Atari

NAME OF SOFTWARE: Auto Mechanics
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette and educational cartridge
DESCRIPTION: List of 16 lessons, covering areas such as: checking used cars, overhauling engines, terms, mechanics careers, mileage, fuel performance, credit, interest.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Educational Systems, Inc.

NAME OF SOFTWARE: Construction
PRICE: $79.00
REQUIRES: Requires Atari 400, 800 Cassette and educational cartridge
DESCRIPTION: 16 lessons covering areas such as: tools, masonry mortar, terms, nails & screws, plumbing, wiring.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Educational Systems, Inc.

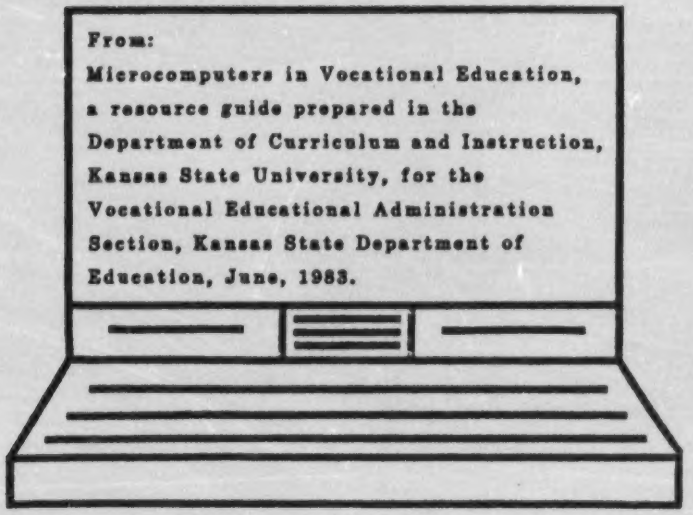
NAME OF SOFTWARE: Digital Electronics
PRICE: $79.00
REQUIRES: Atari 400 or 800 with cassette and educational cartridge
DESCRIPTION: 'Talk and Teach' series of 16 lessons which can be purchased separately. Covers topics such as: digital logic, Boolean Algebra, circuits, adders & decoders.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Educational Systems, Inc.

NAME OF SOFTWARE: General Shop Practices
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette and educational cartridge
DESCRIPTION: 16 lessons covering areas such as: tool identification, fasteners & hardware, measuring, soldering, cutting & welding, employment.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Educational Systems, Inc.

NAME OF SOFTWARE: Industrial Solid-State Electonics
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette and educational cartridge
DESCRIPTION: Series of 16 lessons covering topics such as: switches & relays, transformers, electric motors, gating circuits, electronic instruments.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Educational Systems, Inc.

NAME OF SOFTWARE: Mathematics for Electronics
PRICE: $79.00
REQUIRES: Atari 400 or 800 Cassette, educational cartridge
DESCRIPTION: A series of 16 lessons covering topics such as: arithmetic operation, using electronic calculators, roots & powers.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Dorsett Educational Systems, Inc.

NAME OF SOFTWARE: Player-Missile graphics tablet
PRICE: $19.95
REQUIRES: Atari (diskette only) (24K)
DESCRIPTION: Four Color graphics display
PUBLISHER: Dynacomp, Inc.
SOURCE: Electronic Learning, Vol 20, No 6 March 1983, p. 56


From:
Microcomputers in Vocational Education, a resource guide prepared in the Department of Curriculum and Instruction, Kansas State University, for the Vocational Educational Administration Section, Kansas State Department of Education, June, 1983.

Uses of Microcomputers in Counseling, Basic Skills, and General

This section combines the software most frequently used in vocational counseling, basic skills software used in tutorial or skill and drill practice of basic subject areas, and general software many vocational educators have found helpful to their effective organization and administration for teaching. There is an extensive quantity of basic skills and general software tools available. The following listing represents the most frequently cited programs. Many of these programs are available for more than one brand of computer, or similar programs are available for most computers.

Educators working in vocational counseling have been enthusiastic about the programs which are available. Some of the software is a compact index or source list of training institutions. Other software has been created to allow the individual student to explore personal attitudes and job skills and then compare these to possible jobs. This allows the student a great deal of flexibility and time to alter the attitudes and/or skill levels and evaluate the altered list of possible employment opportunities. While these software programs can never replace the counselor, they do provide the individual student opportunities for weighing several options. At the same time, the counselor is free to counsel. The guidance programs should never be used as definitive answers, rather as suggestions which point the way to further exploration.

Educators and counselors are also enthusiastic about the many levels of basic skills which have been incorporated into software packages. Basic math, vocabulary building, and spelling programs have been frequently cited by educators who responded to the Kansas State University survey on the use of microcomputers in the vocational education program. This particular area of software development is expanding rapidly. More programs are being developed which are interactive, allowing the teacher to prescribe specific problems or words for individual students. The ability of these software packages to record the number of incorrect attempts as well as the correct answers make them powerful diagnostic tools.

Microcomputers have indeed revolutionized preparation for such skill and aptitude tests as the SAT and College Board exams. These and similar preparatory programs have been frequently cited. Less frequently cited but widely discussed in the professional journals are programs which may be simulation programs or interactive programs designed to sharpen the student's critical thinking skills. Some of these programs are in a game format while others are problem solving or strategy situations.

Finally, the area of general classroom utilities has been popular with educators. These programs are designed to keep gradebooks, individual and class records, inventory classroom supplies, make tests, develop crosswords, or serve as programmed sign boards or announcement centers. Using these general classroom utilities, teachers have created their own letterheads, file labels, and student directories.

The software needs most frequently cited by vocational educators included programs that would keep student grades for all four years and be used as grade cards and transcripts including both GPA and rank in class. Educators also request more software that deals with reading comprehension, particularly applied to problem solving in real life or survival skill situations.

Vocational Counseling, Basic Skills, General

Atari, Commodore

NAME OF SOFTWARE: Career Skills
PRICE: $9.95 tape, $7.50 disk
REQUIRES: 8K Pet
DESCRIPTION: Practice in relating current skills with selected careers. The user is then asked to select a career skill and then review job listings for that skill.
PUBLISHER: Microcomputers in Education
SOURCE: Commodore Software Encyclopedia, 2nd Ed.

NAME OF SOFTWARE: Class Mark Tracking
PRICE: $100.00
REQUIRES: 32K PET, 2040 disk drive, CBM or ASC II Printer
DESCRIPTION: Keep records of student marks up to 50 students, each with 50 marks. Allows for assignment of weighting factors to assist in calculating final grade.
PUBLISHER: Sheridan College
SOURCE: Commodore Software Encyclopedia, 2nd Ed.

NAME OF SOFTWARE: Review Manager
PRICE: $19.95
REQUIRES: Any Commodore with C2N
DESCRIPTION: Allows teacher to create and student to use, a data tape retaining questions and answers of all types. No programming required of teacher. Full scoring given at end of a session.
PUBLISHER: Bits & Bytes
SOURCE: Commodore Software Encyclopedia, 2nd Ed.

NAME OF SOFTWARE: Supervisory Practices
PRICE: $79.00
REQUIRES: Atari 400, Cassette educational cartridge
DESCRIPTION: 16 lessons covering topics such as: Introduction to supervision, leadership style, planning, direction, employee discipline, communications.
PUBLISHER: Dorsett Educational Systems
SOURCE: Publisher's Promotional Material

NAME OF SOFTWARE: Vocational Vocabulary
PRICE: $79.00
REQUIRES: Atari 400, 800 Cassette educational cartridge
DESCRIPTION: 16 lessons covering topic areas such as: carpentry, cabinet making, cooking, designing, health, mechanics.
PUBLISHER: Dorsett Educational Systems, Inc.
SOURCE: Publisher's Promotional Material

TRS-80

NAME OF SOFTWARE: CAIWARE -20
PRICE: $125.00
REQUIRES: TRS-80, 32K, 2 disks
DESCRITPION: An "authoring" program that allows people with no special knowledge of computers to write tests and programs.
PUBLISHER: Scholastic Incorporated
SOURCE: Scholastic Microcomputer Instructional Materials 1982/83

NAME OF SOFTWARE: Classfile
PRICE: $20.95
REQUIRES: 16K (cassette) TRS-80
DESCRIPTION: Compiles averages for student and class, ranks, lists those whose grade falls below a cut off.
PUBLISHER: Scholastic
SOURCE: Scholastic Microcomputer Instructional Materials, 1982/83

NAME OF SOFTWARE: Computerized Career Information
PRICE: $375.00
REQUIRES: Radio Shack III, 48K, Disk
DESCRIPTION: Career game lets students explore jobs in their areas of interest. Covers worker traits for 240 jobs. Job description included. Local and state data may be added to the federal data provided.
PUBLISHER: Bertamex, Inc., Micro School Programs
SOURCE: Instructor. 1982-83 Computer Directory for Schools, Vol. 1, No. 2

NAME OF SOFTWARE: Counselor Support Package
PRICE: $195.00
REQUIRES: Mod 1-Lev 2 - 48K - 2 disk Radio Shack
DESCRIPTION: Maintains record of student conferences. Allows counselors to identify students by class, type, area, etc., who have not had counseling recently.
PUBLISHER: B & B Software
SOURCE: Radio Shack Cat. 26-2114 - Vol. 4

NAME OF SOFTWARE: Detroit 80 Diagnostics
PRICE: $149.00
REQUIRES: Model I/III-32K - 1 disk, Level II/Mod III Basic
DESCRIPTION: Inputs raw scores of Detroit Test for Learning Aptitude. Inputs raw scores, outputs subtest mental ages, median mental age, aptitude analysis, and modality analysis on screen or to printer.
PUBLISHER: Precision People
SOURCE: TRS-80, Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: IQ Test (CS-3203)
PRICE: $14.95
REQUIRES: Min Req: Mod 1-Lev 2 - 16K, TRS-80
DESCRIPTION: Developed from Standard IQ Test, presents 60 questions and scores using a machine language swing routine to keep the correct answers secret.
PUBLISHER: Creative Computing Software
SOURCE: Radio Shack, Cat. 21-2114-Vol. 4

NAME OF SOFTWARE: Kansas Careers
PRICE: $150.00, varies
REQUIRES: Apple II, TRS-80, Model III
DESCRIPTION: A Career guidance system that evaluates the user's attitudes, interests, skills, etc., and suggests possible job categories.
PUBLISHER: Kansas Careers
SOURCE: Kansas Careers Publicity Materials

NAME OF SOFTWARE: Life Choices (in Basic)
PRICE: $35.00 Cass.
REQUIRES: Mod 3 - 32K Radio Shack
DESCRIPTION: Students make educational, employment, family & financial choices for each year of age which create context for later choices.
PUBLISHER: Social Science Software
SOURCE: Radio Shack - Cat. 21-2114-Vol. 4

NAME OF SOFTWARE: Mind-Memory Improvement Course Steps 1, 2
PRICE: $58.00 cas.
REQUIRES: Mod 1-Lev 2 - 16K, Mod 3 - 16K Radio Shack
DESCRIPTION: Mind uses interesting graphics to present easy method of memorizing facts, places, dates, names with pupils'faces, techniques for better study and listening skills. 19 programs 6 audio cassettes
PUBLISHER: TYC Software
SOURCE: Radio Shack, Cat. 26-2114 - Vol. 4

NAME OF SOFTWARE: PIAT 80 Diagnostics
PRICE: $149.00
REQUIRES: Model I/III - 32K - 1 disk, Level II/Mod III Basic
DESCRIPTION: Inputs items missed on the math subtests of the PIAT and outputs four Diagnostic Reports including IEP's. PIAT 80 converts raw scores for all PIAT subtests.
PUBLISHER: Precision People Inc.
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Sigi on Microcomputer
PRICE: $1200.00
REQUIRES: TRS-80-Model II-64K - 2 disks
DESCRIPTION: Interactive guidance and information designed to help students make career decisions (2 yr or 4 yr college)
PUBLISHER: Educational Testing Service
SOURCE: Radio Shack Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Test Taking Skills
PRICE: $29.00
REQUIRES: TRS-80 Color Computer 16K
DESCRIPTION: Presents multiple choice questions. Tutors students on the presence of verbal clues to the right answer or to obvious wrong answers.
PUBLISHER: J. B. Hirsch
SOURCE: Radio Shack Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: WISC-R 80
PRICE: $49.00 disk
REQUIRES: Model I/III-32K-1 disk-Level II/Mod III Basic
DESCRIPTION: May be used in conjunction with WISC-R 80 Diagnostics diskette to output educational recommendation for clients high or low WISC-R subtests based on chronological age.
PUBLISHER: Precision People
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: WISC-R 80 Disgnostic
PRICE: $149.00
REQUIRES: Model I/III-32K-1 disk Level II/Mod III Basic TRS-80
DESCRIPTION: WISC-R 80 inputs raw scores from adminstration of the WISC-R. Outputs includes scaled scores, MA's, IQ's, Intelligence Ranges, Clinical Impressions, Scaled Score Profile, SD's Chronological Age
PUBLISHER: Precision People
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

NAME OF SOFTWARE: Word Search
PRICE: $15.00 Cass
REQUIRES: Model I/III-16K-Level II/Mod III, Basic TRS-80
DESCRIPTION: Print a Word Search Puzzle and Answers for any group of words to maximum of 50.
PUBLISHER: Joseph G. Peterson
SOURCE: TRS-80 Educational Software Sourcebook, Cat. No. 26-2756

Apple

NAME OF SOFTWARE: College Boards SAT 81/82 Preparation Series
PRICE: $149.95
REQUIRES: Apple II, 16K
DESCRIPTION: 25 programs offering comprehensive coverage of English and mathematics subjects. Presents material of same level of difficulty and in the same form as used in the Collage Board examination, based on post exams.
PUBLISHER: Krell Software
SOURCE: Swifts, 1982, Apple II, Educational Software Directory

NAME OF SOFTWARE: Contemporary Living Series
PRICE: $175.00, $29.95
REQUIRES: Applesoft
DESCRIPTION: Making Decisions, You Can Succeed, You and the Law, Making and Keeping Friends, Reaching the Age of Responsibility, How to Read a Map
PUBLISHER: Phillip Roy, Inc.
SOURCE: Swifts, 1982, Apple II, Educational Software Directory

NAME OF SOFTWARE: Crossword Magic
PRICE: $50.95
REQUIRES: Apple, 48K, printer optimal
DESCRIPTION: Teacher can create puzzles from 3 x 3 up to 20 x 20 boxes using their own vocabulary.
PUBLISHER: Scholastic Incorporated
SOURCE: Scholastic Software

NAME OF SOFTWARE: Gradebook
PRICE: $25.95
REQUIRES: Apple II, 32K, Disk, DOS 3.3, printer optional
DESCRITPION: Store records for up to 9 classes of 30 student. Alphabetizes, computes statistics, allows teachers to change scores or roster.
PUBLISHER: Scholastic Incorporated
SOURCE: Scholastic Software

NAME OF SOFTWARE: Improving Memory Skills
PRICE: $99.95
REQUIRES: Apple II
DESCRIPTION: Micro-applications give practice in using several memory techniques learned from text. Computer assisted pre and post-tests, monitoring
PUBLISHER: Educational Programming Systems
SOURCE: Swifts, 1982 Educational Software Directory, Apple II Edition

NAME OF SOFTWARE: Job Readiness - Assessment and Development
PRICE: $165.00
REQUIRES: Apple II, 48K disk
DESCRIPTION: Includes: assessment of learner attitudes about work, filling out job applications, job interviews, and job placement resources.
PUBLISHER: Learning Arts
SOURCE: Publisher's Promotional Material

NAME OF SOFTWARE: Know Yourself
PRICE: $11.95, cassette
REQUIRES: Apple II, 16K Integer
DESCRIPTION: Alcohol, using body weight, etc., predicts likely behavior; Sex Role, Life Expectancy, Psychotherapy; computer literacy.
PUBLISHER: Creative Computing
SOURCE: Swifts, 1982, Apple II, Educational Software Directory

NAME OF SOFTWARE: Money! Money!
PRICE: $39.95
REQUIRES: 48K, Apple II, disk
DESCRIPTION: Designed to provide practice in working with concepts involving money.
PUBLISHER: Hartley Courseware
SOURCE: Vanloves 1983 Apple II/II Software Directory

NAME OF SOFTWARE: Personal Financial Planning
PRICE: $99.95
REQUIRES: Apple II
DESCRIPTION: 250 page text w/program. Preparing a personal balance sheet for use in analyzing net worth. Compiling annual income and expense summaries, analysis of insurance, investment, and retirement programs.
PUBLISHER: Educational Programming Systems
SOURCE: Swifts, Apple II, 1982, Educational Software Directory

NAME OF SOFTWARE: Personal Work Series
PRICE: $199.00 for all seven programs or $29.95 each
REQUIRES: Applesoft or Apple II with language card
DESCRIPTION: How to Get and Hold a Job, Self Concept and Work, The Interview, You Can Get the Job, Earning Money Now, First Weeks of Work, What You Should Know About Insurance.
PUBLISHER: Phillip Roy, Inc.
SOURCE: Swifts, 1982, Apple II, Educational Software Directory

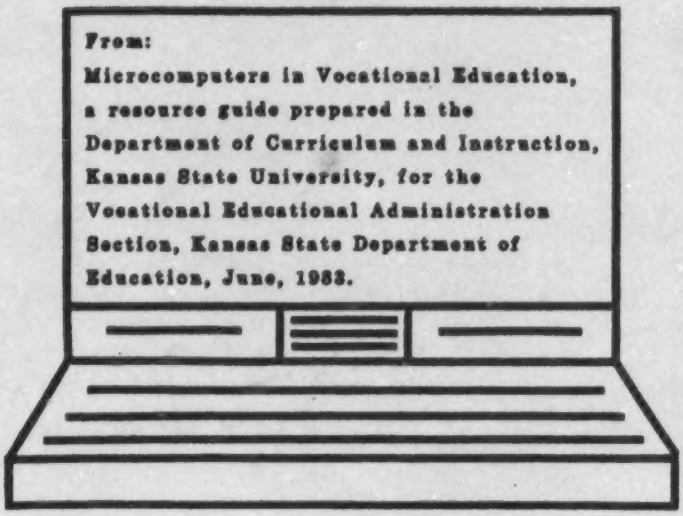
NAME OF SOFTWARE: SAT English 1
PRICE: $30.00
REQUIRES: 48K Apple II
DESCRIPTION: Provides aid to students taking verbal section of the SAT for college entrance. By providing the explanations of all answer choices for the 160 questions, a student learns the reasoning behind each choice.
PUBLISHER: Micro Lab Learning Center
SOURCE: Swifts, Apple II, 1982, Educational Software Directory

NAME OF SOFTWARE: School Utilities Vol. II
PRICE: $39.95
REQUIRES: 32K, Dos 3.3, Apple II
DESCRIPTION: Calculates readability of material typed into the computer using Dale-Chall, Fry or Ragor methods.
PUBLISHER: MECC
SOURCE: Scholastic Microcomputer Instructional Materials 1982/83

NAME OF SOFTWARE: Teacher Utilities Vol. I
PRICE: $30.00 diskette
REQUIRES: Apple II, some programs require printer
DESCRIPTION: Block letter, crossword, crossword edit, posters, test generator, word find, and word find editor require printer. Frequency, Percent, and Review which reviews and drills students.
PUBLISHER: MECC
SOURCE: Swifts, 1982, Apple II, Educational Software Directory

NAME OF SOFTWARE: Teacher Utilities, Vol. 2, Vol. 3
PRICE: $30.00 a diskette
REQUIRES: Apple II, can use printer
DESCRIPTION: Allow teacher to enter questions and answer lessons by storing them as files on a student presentation diskette. Allow editing or adding to an existing lesson. The student presentation diskette is a set of lessons on any subject area. Max of 99 questions, appear in random order.
PUBLISHER: MECC
SOURCE: Swifts, 1982, Apple II, Educational Software Directory

NAME OF SOFTWARE: Work
PRICE: $175.00
REQUIRES: Requires Apple II, 48K, disk, TRS-80 48K
DESCRIPTION: Includes: how to get and hold a job, job and you, self-concept and your work, part-time jobs, new in the job, and interviewing.
PUBLISHER: Learning Arts
SOURCE: Publisher's Promotional Material


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Software Sources Addresses

Academic Software
22 E. Quackenbush Avenue
Durmont, NJ 07628

Addison-Wesley Publishing Co.
Business & Professional Division
Reading, MA 01867
617/944-3700

Ag-Com
P.O. Box 706
Muscatine, IA 52761
319/264-3267

Agnet
Art Barnaby
Dept. of Agricultural Economics
KSU
Manhattan, KS 66506
913/532-5823

Agri-Computer Systems
113 N. Ninth Street
Frederick, OK 73542
405/335-2320

Agricultural Management &
Economic Consulting
315 Haggerty Lane
Bozeman, MN 59715
406/586-0548

Agri Ware Inc.
P.O. Box 1715
Hereford, TX 79045

Andent
1000 North Avenue
Waukegan, IL 60085
312/223-5077

Apple Computer Inc.
20525 Mariani Avenue
Cupertino, CA 95014
408/996-1010

Applied Software Technology
14125 Capli Drive
Los Gatos, CA 95030

Applied Microsystems
P.O. Box 832
Roswell, GA 30077

Aurora Systems
2040 East Washington Avenue
Madison, WI 53704
608/249-5875

Avant Garde Creations
P.O. Box 30160
Eugene, OR 97403
503/345-3043

B&B Software
P.O. Box 2090
Ann Arbor, MI 48106
313/668-8152

Bits & Bytes
Fenner Block, 33 Church St.
Fredonia, NY 14063
716/673-1515

BLS, Inc.
2501 Silverside Road, Suite One
Wilmington, DE 19810
302/478-2451

Brain Box
601 West 26th Street
New York, NY 10001
212/989-3537

Bristow, Duane
Rt. 3, Box 444C
Albany, KY 42602
606/387-5884

Brookstone Associates
59 Gold Star Road
Cambridge, MA 02140
617/661-6785

Broussald Feeds, Inc.
110 E. Third Street
P.O. Box 2577
Lafayette, LA 70501
318/234-7378

C&H Video
110 West Caracas Avenue
Hershey, PA 17033
717/533-8480

Cochran, Thomas J., Jr.
P.O. Box 176
Industry, PA 15052

Comp-U-Card of America
777 Summer Street
Stanford, CT 06901
203/324-9261
800/243-9000

Computation
P.O. Box 502
Troy, MI 48099

The Computer Center
302 Commercial
Waterloo, IA 50701
319/232-9504

Computer House Division
1407 Clinton Road
Jackson, MI 49202
517/782-2132

Computerland
2500 B South Columbia Road
Grand Forks, ND 55082
612/436-7198

Continental Software
12101 Jefferson Blvd.
Culver City, CA 90230
213/371-5612

Creative Computing Software
P.O. Box 789-M
Morristown, N.J. 07960
201/540-0445

Curriculum Publications Clearinghouse
Western Illinois University
47 Horrabin Hall
Macomb, Illinois 61455

Decision Data, Inc.
213 Lincoln Way
Ames, IA 50010
515/233-4807

Dorsett Educational Systems, Inc.
P.O. Box 1226
Norman, OK 73070
405/288-2300

Dyna Comp, Inc.
1427 Monroe Avenue
Rochester, NY 14618
716/442-8731

Ed Thayer
P.O. Box 271
Greenview, IL 62642
217/968-5825

Educational Programming Systems
1328 Baus Boulevard
St. Louis, MO 63132
314/991-0300

Educational Testing Services
SIGI Office
Princeton, NJ 08541
609/734-5165

The Electric Farm
Rt. 1, Box 86
Douglas, KS 67039
316/746-2650

EMC Publishing
Changing Times Education Services
300 York Avenue
St. Paul, MN 55101

Fred's Micro Ware
Rt. #1, Box 162
Amboy, MN 56010
507/674-3068

Fulmer Assoc.
1132 Via Jose
San Jose, CA 95120
405/997-1154

Gregg/McGraw Hill
1221 Avenue of the Americas
New York, NY 10020

Harris Laboratories
624 Peach St., P.O. Box 8037
Lincoln, NE 68501
402/476-2811

Hartley Courseware, Inc.
Box 341
Dimondale, MI 48821

Harvest Computer Systems
203 West 11th St.
Alexandria, IN 46001
317/724-9527

Hayden Book Company, Inc.
50 Essex Street
Rochelle Park, NJ 07662
800/631-0856

J. B. Hirsch
225 Duke Ellington Blvd, 14A
New York, NY 10025
212/662-0278

Horizons Unlimited
5367 Sage
Edwards, CA 93523
805/258-8412

Illinois State Board of Education
Attn: Kenneth Smith
Data Systems Section
217/782-4321

Interpretive Education Incorporated
157 S. Kalamazoo Mall
Suite 250
Kalamazoo, MI 49007
616/345-8681

K-12 Micromedia
P.O. Box 17
Valley Cottage, NY 10989

Kansas Careers
Kansas State University
Manhattan, Kansas 66506
913/532-6540

Krell Software
21 Milbrook Drive
Stony Brook, NY 11790
516/751-5139

Lawrence Hall of Science
Math/Computer Education Project
University of California
Berkeley, CA 94720

Learning Arts
P.O. Box 179
Wichita, KS 67201
316/682-6594

Life Science Associates
1 Fenimore Road
Bayport, NY 11705
516/472-2111

McGraw-Hill Book Company
School Division
1221 Avenue of the Americas
New York, NY 10020
800/223-4180

MECC
2520 Broadway Drive
St. Paul, MN 55113
612/376-1118

Medi-Sim, Inc.
350 Union Station
Kansas City, MO 64108
816/474-4711

Micro-Ag
RR 1
Princeton, IA 52766
319/289-4358

Micro-Comp Incorporated
2015 N.W. Circle Blvd.
Corvallis, OR 97330

Microcomputers in Education
4148 Winnetka Avenue, North
Minneapolis, MN 55427
612/533-2781

Micro Lab Learning Center
3218 Skokie Valley Road
Highland Park, IL 60035
312/433-7550

Micro Learningware
P.O. Box 2134
North Mankato, MN 56001
507/625-2205

Microphys
2098 Ford Street
Brooklyn, NY 11229
212/646-0140

Micro Power & Light Co.
12820 Hillcrest Road, Suite 224
Dallas, TX 75230
214/239-6620

Microsoft Consumer Products
400 180th Avenue, N.E.
Bellevere, WA 98004
206/454-1313

Minnesota Curriculum Services Center
3554 White Bear Avenue
White Bear Lake, MN 55110
612/770-3943

Minnesota Educational Computing
Consortium (MECC)
2520 Broadway Drive
St. Paul, MN 55113
612/376-1118

Moll, Jeffrey
RR 1
Shannon, IL 61078
815/864-2881

Henry Moseley
RFD
Grafton, VT 05146
802/843-2370

Muse Software
347 N. Charles St.
Baltimore, MD 21201
301/659-7212

Newton, Allen S.
Route 4, Box 216A, Dept. RC1
Sylvania, GA 30467

Oklahoma State University
Attn: Ted R. Nelson
Dept. of Agricultural Economics
Extension Farm Management

On-Line Systems
36575 Mudge Ranch Road
Coarsegold, CA 93614
202/683-6858

Joseph G. Peterson
1109 Independence Drive
West Chester, PA 19380
215/388-6306

Phillips Roy, Inc.
P.O. Box 68
Indian Rocks Beach, FL 33535

Pillsbury Center
Mail Center 3286
200 S. 6th Street
Minneapolis, MN 55402
612/330-8732

Powersoft
P.O. Box 157
Pitman, NJ 08071
609/589-5500

Precision People, Inc.
P.O. Box 17402
Jacksonville, FL 32216
904/642-1980

Sadler Enterprise
324 Cispus Road
Randle, WA 98377
206/497-7921

Scholastic, Inc.
904 Sylvan Av.
Englewood Cliffs, NJ 07632

Sheridan College of Applied Arts
1430 Trafalgar Road
Oakville, Ontario
CANADA
416/845-9430

Silicon Valley
1625 El Camino Road #4
Belmont, CA 94002
415/593-4344

Sirius Software
10364 Rockingham Drive
Sacramento, CA 95827
916/366-1195

Social Science Software
17408 N.E. 19th Place
Bellevere, WA 98008
206/747-0948

South Western Publishing Co.
5101 Madison Rd.
Cincinnati, OH 45227
513/271-8811

Specialized Data Systems
P.O. Box 8278
Madison, WI 53708
608/241-5050

Stoneware
Microcomputer Products
50 Belvedere Street
San Rafael, CA 94901
415/454-6500

Strategic Simulations, Inc.
465 Fairchild Drive, Suite 108
Mountain View, CA 94043
415/964-1353

Taylor Enterprises
Route 1, Box 32-A-7
Jacksonville, AR 72076
501/982-3791

Teck Associates
P.O. Box 8732
White Boar Lake, MN 55110
612/429-5570
612/739-4939
Before August, 1981--Cook's Computer Co.

Texas Instruments, Inc.
Personal Computer Division
P.O. Box 10508
Lubbock, TX 79408
800/858-4565

Tomorrow's Numerics
5201 Evandale Drive
Enid, OK 73701
405/233-6618

TYC Software
40 Stuyvesant Manor
Geneseo, NY 14454
716/243-3005

University of Arizona
Dr. Lee Droegemueller
Associate Professor
College of Education
EDFA Tucson, AZ 85721
602/626-5955

Valpar International
3801 E. 34th St.
Tucson, AZ 85713

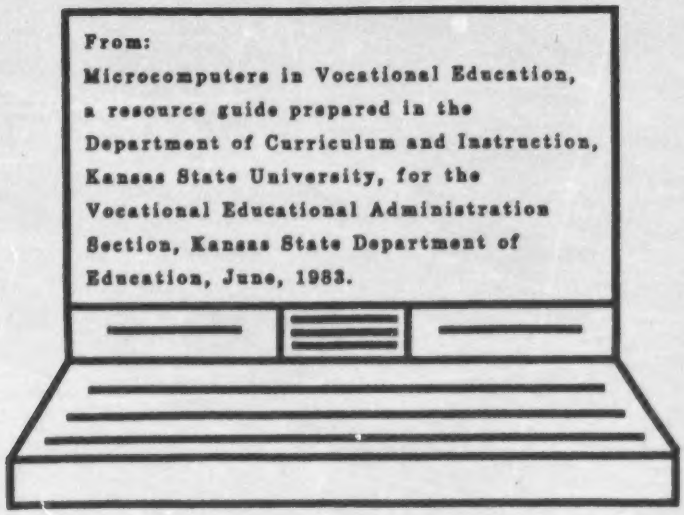
Visicorp
2895 Zanker Road
San Jose, CA 95134
408/946-9000

Wait Cattle Co.
133 Carolyn Lane
Nicholasville, KY 40356
606/887-1563

Yzaguire, Raul
P.O. Box 898
Premont, TX 78375
512/348-3687

Zalnerunas, C.J.
3034 W. Columbus Ave.
Chicago, IL 60652
312/778-3539

Zeiller, John F.
305 Card Road
Hillsdale, MI 49242
517/283-2101


From:
Microcomputers in Vocational Education,
a resource guide prepared in the
Department of Curriculum and Instruction,
Kansas State University, for the
Vocational Educational Administration
Section, Kansas State Department of
Education, June, 1983.

Annotated Bibliography:
Vocational Education

General, Background, Futuristic Considerations

Bergman, Robert E., "Technology and Training: The Shape of Tomorrow's Seminar." Performance and Instruction, V20 N9 (Nov. 1981), pp. 17-20.

Discusses the impact of new technology on 'future seminars' and compares new teaching techniques with traditional instruction.

Boyd, Gary M., "Four Ways of Providing Computer Assisted Learning & Their Probable Impacts." Computers and Education, V6 N3 (1982), pp. 305-10.

Analyzes relationship between modes and types of client groups likely to employ computer assisted learning (CAI). Prepackaged CAI/CMI, auto elaborative CAI, personally guided small group CAI, and gated cooperatively elaborated CAI are described.

Bristol, John L.; and others, "State of the Art." Voc Ed, V57 N3 (April 1982), pp. 40-45

Presents 5 examples of successful computer oriented programs. Computer literacy, agricultural education, benefits to students and teachers, state delivery systems and Time-Shared, Interactive, Computer-Controlled, Information Television

Cauchon, Paul A., "More Efficient Use of Drill and Practice Exercises Through Reproducible Random Sequences." Journal of Computers in Mathematics and Science Teaching, V1 N4 (Summer 1982), pp. 28-30.

Program offers the principal advantages of individualized problem sequences and interactive remedial assistance, and runs in a format that allows one machine to serve more students than the common types of computer based exercises, is described. Copies of the program listing are available from creator.

Cicciarella, Charles, "Test Writer." Classroom Computer News, V2 N4 (Mar-Apr. 1982), pp. 36-37.

This program produces multiple-choice examinations from a pool of questions created by the user. The output is a printed copy of the exam and an answer key. The program is written in Applesoft BASIC and requires an Apple II Plus computer with a 32K, a disk drive, and a printer.

DeVore, Paul W., "1981 and Counting." Voc Ed, V56 N2 (Mar. 81), pp. 60-61.

Developments in microelectronics will change society, information exchange, jobs and workers, research and development, and global interdependence.

Dlabay, Les R., "The Educators Guide to Computer Periodicals." Curriculum Review, V21 N2 (May 1982), pp. 144-146.

Annotated. (1) 7 major periodicals designed especially for teachers who wish to use computers as classroom aids, (2) 12 general interest computer periodicals for educators, and (3) 15 additional for specialized interest.

Dyrenfurth, M. J., & Lemmons, D., "Vocational Education's Role in Developing Technological Literacy." Canadian Vocational Journal, V18 N1 (May 1982), pp. 32-35.

The authors discuss the role industrial arts and vocational education must play in developing the technological literacy of our youth.

Guggenheim, M. J., & Lazenby, P., "Microcomputer Management of Learning for TEC Courses." Vocational Aspect of Education, V32 N81 (April 1980), pp. 13-17.

Describes the development and field testing of microcomputer programs to construct phase tests, analyze student performance and prepare individualized remedial activities for Technician Education Council in Great Britian.

Klenow, Carol & Rose, Shelly York, "Oakland County: A Model for Instructional Computing Support Services." Technological Horizons in Education, V10 N1 (Sept. 1982), pp. 113-14, 123.

Oakland Schools (Mich.) Interactive and Instructional Computing Dept. provides support services to users of 1500 microcomputers and 450 terminals. Selected services which may be successfully adapted to fit other district needs are discussed, including a Microcomputer Loan Program, software preview center, and workshops for teachers and administrators.

Kock, H. T.; and others, "New Technology for Teachers." Voc Ed, V57 N5 (June 1982), pp. 35-41.

One of a series of 5 articles discussing various aspects of computers in education, including a discussion of vocational courses delivered by broadcast and cable television.

Licata, Christine, M., & Inzinga, Joan, M., "The Chip that Roared: Of Micros and Men." Business Education Forum, V35 N7 (April 1981), pp. 116-117.

Describes curriculum revision of accounting and office practice programs at the National Technical Institute for the Deaf at Rochester Institute of Technology through infusion of data processing skills is described.

"NAPA College Programs Students for Careers in Micro Electronics." Technological Horizons, V7 N6 (Nov. 1980), p. 40.

Describes a two year curriculum preparing students for occupations in electronics technology, biomedical electronics, and communication's technology.

Nasman, L. O., "Computers Mean New Decisions." Voc Ed, V57 N3 (April 1982), pp. 36-38.

Discusses 5 areas in which microcomputers have a major effect upon vocational education. Also discusses the need for inservice education for vocational educators to keep abreast of the developing technology.

NASSP Bulletin, V66 N455 (Sept. 1982).

Entire issue devoted to computers.

Okey, James R., & McGarity, John, "Classroom Diagnostic Testing with Microcomputers." Science Education, V66 N04 (July 1982), pp. 571-79.

Discusses value of computer diagnostic testing (CDT) including time factors in preparing programs, cost analysis, and possibilities for activities other than CDT. Includes a computer program, written a BASIC for PET, and instructions for using the program.

Orr, William T., Jr., and others, "Committed to Computers." Florida Vocational Journal, V7 N4 (Feb-Mar 1982), pp. 8-16.

Describes the individualized manpower training system designed for academically disadvantaged students.

Uthe, Elaine F., "The Computers in Our Lives." Voc Ed, V57 N3 (April 1982), pp. 26-29.

Discusses record keeping and data base function, computer graphics, problem solving simulations, and others and how they will affect office education, home economics education, marketing and distributive education, and trade and industrial education.

Wilson, Kara Gae, "Administrative Guidelines for Introducing Computers into the Curriculum." NASSP Bulletin, V66 N455 (Sept. 1982), pp. 6-11.

Focuses on curriculum development and successful coordination.

Wools, Blanche E., & Loertscher, David V., "Some Sure-Fire Microcomputer Programs." School Library Journal, V28 N10 (Aug. 1982), pp. 22-24.

Briefly discusses some of the factors to be considered in selecting instructional software for microcomputers and presents annotated list of instructional computer programs recommended by authors for first purchases in developing software collections. A list of distributors is attached.

Voc Ed, V57 (Apr. 1982).

Entire issue devoted to microcomputers.

Agricultural Education

Agricultural Education Magazine, V54 N7 (Jan. 1982).

Journal - Theme is computer in agricultural education.

Agri Comp, The Reference for Farm Computing, 103 Outdoors Bldg. Columbia, MO., 65201.

All issues (average size 98 pp.) contain articles, software, advertising tailored to the needs of farmers. $15 per year (6 issues) (as of March 1938, VI had 4 issues published).

Hudson, Jordan C., "Computer Assisted Instruction in Agricultural Education." Agricultural Education Magazine, V53 N2 (Aug. 1980), pp. 19-20.

Impact of computers on education, with specific applications for agricultural education including drill and practice testing, simulations, and student record maintenance.

Rasmussen, Wayne D. "The Mechanization of Agriculture," Scientific American, V247 N3 (Sept. 1982), pp 76-89.

Discusses technological innovations affecting the economic and social basis of farm life, focusing on trends, farm equipment, productivity, and influence of computers in all phases of agribusiness.

Business Education

Alexander, Wilma Jean, "Microcomputers: Impact on Society and Education." Business Education Forum, V35 N8 (May 1981), pp. 19-21.

Brown, D. L., "Introducing Computers to the Accounting Classroom." The Balance Sheet, V62 N4 (Dec. 1980/Jan. 1981), pp. 179-181, 191.

Casady, Mona J., "Teaching Word Processing in Business Courses." The Balance Sheet, V62 N2 (Oct. 1980), pp. 57-60.

This article tells how you can incorporate word processing into typing, shorthand, secretarial procedures.

Cicero, John J., Jr., "Data Processing: Basic Concepts and Skills." The Balance Sheet, V62 N5 (Feb. 1981), pp. 203-205.

High schools can offer a well rounded enough program in computer operations and programming for many jobs.

DeVore, Paul W., "Microprocessors, Robotics, and Work." Man/Society/Technology, V41 N4 (Jan. 1982), pp. 6-9.

The author explores several recent technological developments which will have an impact on future technical education.

el Lozy, Mohammed, "Learning to Type with a Computer." On Computing, V3 N1 (Summer 1981), pp. 38-39.

Three computer programs designed to teach typing skills are described and compared.

Gabel, David, "Word Processing for Personal Computers," Personal Computing, V6 N8 (Aug. 1982), pp. 82, 97, 98, 102, 106.

Compares in table format 57 commercially available word processing programs for microcomputers and provides definitions/explanations for comparative criteria categorized according to editing and printer/ formatting features.

Halvorson, N., "Training to Use Microcomputers for Accounting Purposes." Journal of Business Education, V57 N7 (April 1982), pp. 270-71.

Hunt, Ian, "Developing a Design Philosophy for Business Games." Simulation/ Games for Learning, V12 N3 (Fall 1982), pp. 95-112.

Discusses design criteria and educational objectives of computerized businesses games when used as an adjunct teaching method. Project UNCLE BURT (Univ. College London Experiment on Business Research and Training), which uses computer games to simulate the management environment in undergraduate business education courses described in detail.

Kinkel, Gilbert J., "Developing Word Processing for Students." School Business Affairs, V48 N10 (Sept. 1982), pp. 30-31.

Milwaukee (Wisc.) has two schools that offer courses in word processing as a part of their business education curriculum. Author describes the establishment of the programs.

Kozlowski, Patty, "Word Processing: What are Educators Facing Today." The Balance Sheet, V62 N2 (Oct. 1980), pp. 52-56.

Training on how to operate machines is important. Also, language arts skills and proof reading and spelling should be emphasized.

McComb, Gordon, "A Primer for Word Processing: How to Choose the Right Word Processor." Creative Computing, V7 N7 (July, 1981), pp. 84, 86, 88, 90-91.

McWilliams, P., "Word Processing." Popular Computing, V1 N5 (March 1982), pp. 52-54.

Describes the kind of equipment needed for word processing.

Mundrake, George A., "Data Processing: A Challenge for the 80's." The Balance Sheet. V62 N5 (Feb. 1981), pp. 196-200.

Gives courses, background and future educational requirements for computer hardware careers, computer science careers, and data processing careers.

Muscat, Eugene, "Microcomputers in Business Education." Business Education World,, V60 N4 (March-April 1980), pp. 10-11.

To acquaint business teachers with the equipment, terminology, and wide range of applications of microcomputers in business education programs.

Skudrna, Vincent J., "The Auditing of Computerized Accounting Systems." Journal of Business Education, V57 N5 (Feb. 1982), pp. 190-92.

Describes an investigation undertaken to indicate the curricular content (knowledge and skills) needed to prepare the accounting student to audit computerized accounting systems. Areas studied included programming languages, data processing,desired course training, and computer audit techniques.

Stocker, H. R., "Using the Computer As a Partner in Teaching Filing Rules." The Balance Sheet, V61 N5 (Feb. 1980), pp. 209-211.

Explains how students can use the computer in applying filing rules.

Tesch, R. C., Sr., "Teaching Data Processing with a Microcomputer." Business Education Forum, V34 N6 (March 1980).

Deals with microcomputer hardware and software that is available.

Wallace, I. G., "Computers in the Typing Class?" Business Education Forum, V6 N2 (Nov. 1981), pp. 27-28.

The author describes 4 reasons that computers will eventually replace typewriters in the typing class.

Health Related Education

Phelps, John L., & Dennison, Darwin, "Using Microcomputers for Health Education Research." Health Education, V13 N3 (May-June 1982), pp. 27-29.

Include many uses of microcomputers in health education stressing flexibility, versatility, and easy use.

Home Economics Education

Braun, Joseph A., Jr., & Slobadzian, Kurt A., "Can Computers Teach Values?" Educational Leadership, V39 N7 (April 1982), pp. 508-10.

When applied to values education, the personal computer provides interactions that promote reflective analysis while ensuring discretion and psychological safety.

Caldwell, Robert M., "The Computer as a Teaching Tool." Journal of Home Economics, V74 N3 (Fall 1982), pp. 45-47.

Elements of computer use in teaching are explored: expense; availability of software; development of interactive instruction; use of graphics, color, flashing, and sound; learner response; and feedback.

Marketing and Distributive Education

Russell, Michael, "Marketing and Microcomputer - A Perfect Combination." Balance Sheet, V63 N6 (April 1982), pp. 292-94.

Provides reasons to include microcomputer in the marketing and distributive education curriculum. Also suggests method for adapting existing curriculum to include the microcomputer.

Trade and Industrial Education

Bisbee, Kolan, K. & Hawkins, Harry M., "More Commands and a Program." Industrial Education, V71 N7 (Oct. 1982), pp. 24-26.

Presents a program which enables the microcomputer to calculate and display the cost of electricity for a number of devices found around the home. Aimed at beginning students learning about electrical energy and consumption rates.

Carter, Jim A., Jr., "How to Buy Microcomputers...and How and Where to Use Them." School Shop, 40, 8 (April 1981), pp. 28-33.

Development of computer area for multiple activity lab.

Duc Guy, Nguyen, "The Microcomputer in Industry Training." Technological Horizons in Education, V9 N3 (Mar. 1982), pp. 65-68.

Describes how the microcomputer can be used in a variety of training situations.

Goetsch, David L., "Implementing a Computer-Aided Drafting Program." School Shop, Feb. 1983, p. 23.

Matthews, John I., "Considerations in Selecting Microcomputers for Instructional Design." Journal of Industrial Teacher Education, V19.N1 (Fall 1981), pp. 26-35.

Suggestions for choosing microcomputers considering hardware, equipment supplies, software development, and implementation.

Schwendau, Mark, & Goetsch, David L., "Implementing a Computer Aided Drafting Program." School Shop, (Feb 1983), pp. 22-23.

Vocational Counseling
Special Needs

Caldwell, Robert M., "Guidelines for Developing Basic Skills Instructional Materials for Use with Microcomputer Technology." Educational Technology, V20 N10 (Oct. 1980), pp. 7-12.

Specific guidelines for designing instructional materials to develop a range of cognitive skills and evolve useful learning strategies.